

Environmental
Resources
Management

July 27, 2006

1630 Heritage Landing Drive
Suite 100
St. Charles, MO 63303
(636) 928-0300
(636) 928-2050 (fax)

Missouri Department of Natural Resources
Division of Environmental Quality
St. Louis Regional Office
7545 South Lindbergh, Suite 210
St. Louis, MO 63125



RE: Second Quarter 2006 Discharge Monitoring
Exceedences & Corrective Actions Taken
SECO Products Facility - Washington, Missouri
NPDES Permit No. MO-0129313
ERM Project No. 0045017

Dear Division of Environmental Quality:

BACKGROUND

On behalf of the Hussmann Corporation (Hussmann), Environmental Resources Management (ERM) is submitting this letter to accompany the Second Quarter 2006 Discharge Monitoring Report (DMR) for the former SECO Products Site (SECO) located in Washington, MO. A ground water remediation system is operated at the Site, which discharges treated effluent to Dubois Creek through a single outfall (Outfall #001) under a National Pollution Discharge Elimination System (NPDES) permit (MO-0129313) issued by the Missouri Department of Natural Resources (MDNR) on July 11, 2003.

On May 25, 2006, ERM conducted the Second Quarter 2006 discharge monitoring event at the Site. On June 12, 2006, ERM received the analytical results for the discharge sample collected. The results indicated that total 1,2-dichloroethylene (1,2-DCE) exceeded the daily maximum and monthly average effluent limits in the Site's NPDES permit. Therefore, on June 12, 2006, ERM performed a follow-up sampling event to obtain an additional discharge sample from the ground water treatment system effluent. The follow-up sample was analyzed and the analytical results were forwarded to ERM on June 29, 2006. The follow-up sample results indicated that both trichloroethylene (TCE) and

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ARTD/RCAP

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RCRA RECORDS

total 1,2-DCE exceeded the daily maximum and monthly average effluent limits in the Site's NPDES permit. An additional sample of the effluent could not be collected and analyzed before June 30, 2006, which is the end of the Second Quarter 2006 sampling period. The DMRs and analytical reports for the initial and follow-up discharge sampling events are contained in Attachment A.

also included VC!

INVESTIGATION OF EXCEEDANCE ROOT CAUSE

On July 7, 2006, in an effort to determine the cause of the effluent exceedances, ERM inspected the air stripping tower associated with the ground water treatment system. During the inspection, ERM shut the system down and accessed the stripper tower media through the bottom two access ports. After inspecting the media it was determined that the media was heavily "clogged" with iron oxide bacteria, which was most likely causing a short-circuiting of the influent water being discharged to the stripper tower for treatment. Therefore, the ground water was most likely receiving minimal treatment prior to being discharged to Dubois Creek.

The change out of the stripper tower media is a budgeted operation and maintenance (O&M) task that is performed at the Site, as needed, on an annual basis. In the past three (3) years however, the stripper tower media has only required change-out approximately every 18 months. ERM last changed out the current media in the stripper tower in August 2005. ERM speculates that disturbances to the discharge line for the recovery well system may have resulted in iron oxide bacteria build-up inside the discharge piping becoming dislodged and being transported to the stripper tower were it resulted in accelerating the timeframe in which the stripper tower media becomes "clogged". These identified discharge line disturbances are as follows:

- Installation and start-up of an additional recovery well (RW-8), as requested and approved by United States Environmental Protection Agency (USEPA) Region VII on May 18, 2006,

→ is stripper too small now w/additional flow? Water chemistry different from contaminant?

- A discharge line fitting failure at the connecting point of RW-8's discharge line to the main influent line to the stripper tower on May 23, 2006, and
- A discharge line fitting failure at the connecting point where RW-2's discharge line connects to the main influent line to the stripper tower on June 12, 2006.

CORRECTIVE ACTION

In an effort to address the effluent limit exceedances, on July 7, 2006, ERM ordered new stripper tower media from Jaeger Products, Inc. in Houston, TX. The media was delivered to ERM's St. Charles, MO office on Thursday, July 13, 2006. Also, on July 13, 2006, the old media was removed from the stripper tower, placed in plastic trash bags, and stock-piled in a lined roll-off container for disposal under an existing special waste disposal profile/permit (4642-S-A06Q) from the St. Louis County Health Department at the Onyx Oak Ridge Landfill in Valley Park, Missouri. On, Monday, July 17, 2006, the new media was placed in the stripper tower and the system restarted. After the system was restarted and allowed to run for approximately three (3) hours, a new effluent sample was collected for analysis to confirm compliance with the effluent limits contained in the facility's NPDES permit. Only 1,2-DCE and TCE were detected in the confirmation sample collected, at concentrations of 0.091 and 0.035 mg/L, respectively. The concentration of 1,2-DCE and TCE are below the daily maximum (0.2 mg/L and 0.16 mg/L, respectively) and monthly average (0.1 mg/L and 0.16 mg/L, respectively) effluent limits in the facility's NPDES permit. Because the resampling effort fell within the 3rd Quarter 2006 sampling period (July thru September), the DMR for the resampling effort will be submitted to your office as documentation of compliance for the 3rd Quarter 2006. A copy of the analytical report for the resampling event is contained in Attachment B to this correspondence for your reference.

*what have they done?
close to monthly average already?*

MDNR
Division of Environmental Quality
July 27, 2006
Page 4

Environmental
Resources
Management

Although this appears to be an isolated incident, ERM will continue to monitor the rate of biofouling of the stripper tower media periodically. If you have any question or comments about the contents of this letter please do not hesitate to contact me.

how often?
more frequent
Sampling, too?

Sincerely,



Alan J. Cork, P.E.
Senior Project Manager

Attachments

cc: Craig Stovall - Hussmann
David Sordi - Ingersoll Rand (electronic copy)
Daniel Gravatt - USEPA Region VII

Attachment A

2nd Quarter 2006 DMRs

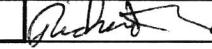
MISSOURI DEPARTMENT OF NATURAL RESOURCES

DIVISION OF ENVIRONMENTAL QUALITY

NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

INSTRUCTIONS:

1. Mail completed report to the MDNR St. Louis Regional Office, 7545 South Lindbergh, Suite 210, St. Louis, MO 63125
2. Report must be signed by the owner and by the analyst. Report should be typed or neatly printed.
3. Part A of the permit specifies the parameters to be monitored, frequency of monitoring and frequency of reporting results. If quarterly reports are required, they are due on April 28, July 28, October 28, and January 28, each report covering the 3-month period not including the reporting month. See the permit for reporting dates other than quarterly.
4. Report results of all analyses, even if performed more frequently than required by Part A of the permit.
5. File a report even if discharge is intermittent and no discharge occurred during the monitoring period. Complete the identification section, write "ND" in the appropriate columns for the dates the facility was checked, and sign the report. NOTE: If a discharge occurs at any time during the monitoring period, it must be reported.
6. Under "Sample Type" indicate whether sample analyzed was: (a) grab sample; (b) 24-hour composite sample; or (c) modified composite sample. NOTE: See permit for type of sample required for each parameter.
7. Under "Sample Type" for flow indicate whether figures shown are based on (a) instantaneous measurements or (b) actual 24-hour measured flow. Figure recorded is to represent the total 24-hour flow for the data shown or a reasonable estimate.
8. Indicate whether samples were collected by owner or by personnel of the lab performing the analyses.

Facility Name:	Former SECO Products Facility Site		Permit Number:	MO-0129313	County:	Franklin	Owner:	Hussmann Corp.	Facility Type:	GW Remediation Systm
Required Frequency of Monitoring:		Quarterly	This Report Covers the Period:		April 1, 2006		through	June 30, 2006		
Dates Sampled		5/25/2006	5/25/2006	5/25/2006	5/25/2006			REMARKS & COMMENTS (Record, as appropriate, such information as method of preservation, methods of sample collection, abnormal age of sample, explanation of unusual results, etc.)		
Time Sampled		1900	1859	1857	1855					
Sample Collected By		M Bates-ERM	M Bates-ERM	M Bates-ERM	M Bates-ERM					
Analyses Date		6/6/2006	5/25/2006	5/25/2006	5/25/2006					
Parameters	Permitted Final Limits		RECORD ACTUAL RESULTS OF ANALYSIS-DO NOT AVERAGE				Sample Type	Sample Analytical Method	8 Recovery Wells Were Operational	
	Daily Max	Monthly Avg	0.047000	-	-	-	24-Hr Est	Direct Measurement		
Flow (mgpd)	*	*	0.047000	-	-	-	24-Hr Est	Direct Measurement	8 Recovery Wells Were Operational	
BOD (mg/L)	NA	NA	NA	NA	NA	NA	-	-		
TSS (mg/L)	NA	NA	NA	NA	NA	NA	-	-		
pH (Std. Units)	6.0-9.0	6.0-9.0	-	7.97	8.04	7.98	Grab	Field pH Meter	Field Measurement	
Fecal Coliform/100 ml	NA	NA	NA	NA	NA	NA	-	-		
1,2-dichloroethylene (mg/L)	0.200	0.100	0.402	-	-	-	Grab	EPA Method SW8260B	Preservation by HCL & Cool to 4° C	
1,1-dichloroethylene (mg/L)	0.008	0.008	ND (<0.005)	-	-	-	Grab	EPA Method SW8260B	Preservation by HCL & Cool to 4° C	
trichloroethylene (mg/L)	0.16	0.16	0.065	-	-	-	Grab	EPA Method SW8260B	Preservation by HCL & Cool to 4° C	
v vinyl chloride (mg/L)	*	*	ND (<0.002)	-	-	-	Grab	EPA Method SW8260B	Preservation by HCL & Cool to 4° C	
Analyses Performed By:	Severn Trent STL, 13715 Rider Trail North, Earth City, MO 63045				Signature of Analyst:		 /Rich Mannz, STL			
Report Approved By Owner:	 CRAIG STOVALL, ANALYST				Global Environmental, Health, & Safety		Date:	07/26/06		

Notes:

* = Monitoring requirement only

NA = Not applicable/not required to be analyzed

ND = Not detected above the detection limit indicated

"- = not analyzed

J = analyte is reported an an estimated value below the method reporting limit

Based on MDNR Form MO 780-1307 (7-01)

SEVERN
TRENT

STL

STL Chicago
2417 Bond Street
University Park, IL 60466

Tel: 708 534 5200 Fax: 708 534 5211
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SEVERN TRENT LABORATORIES ANALYTICAL REPORT

JOB NUMBER: 246777

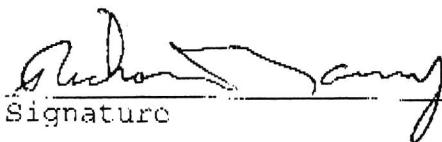
Prepared For:

Environmental Resource Management
1630 Heritage Landing Drive
St. Charles, MO 63303

Project: Seco

Attention: Alan Cork

Date: 06/09/2006


Signature

Name: Rich Mannz
Title: Project Manager
E-Mail: rmannz@stl-inc.com

6/9/06
Date

STL Chicago
2417 Bond Street
University Park, IL 60466

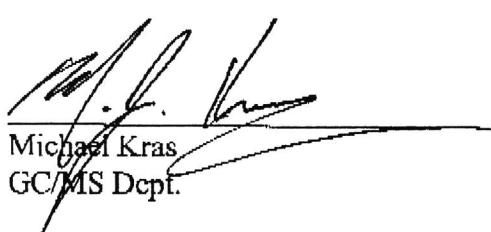
PHONE: (708) 534-5200
FAX.: (708) 534-5211

This Report Contains (14) Pages

Severn Trent Laboratories Chicago
GC/MS Case Narrative

Environmental Resource Management
SECO
Job Number: 246777
VOA DATA

1. The water sample was properly preserved and analyzed within the 14-day hold time for preserved samples.
2. All Method Blank target compounds were below reporting limits.
3. The LCS (Laboratory Control Sample) sample had all controlled spike recoveries within the in-house generated QC limits.
4. Matrix Spike/Matrix Spike Duplicate analyses were not performed on this sample set.
5. All of the volatile samples had surrogate recoveries within the in-house generated QC limits.
6. The sample was prepared using Method 5030 and analyzed following SW846 Method 8260B and 8000B. All other calibration criteria were met per method or SOP (for minimum R values for certain compounds). The low point in the initial calibration verifies the base reporting limits. The target compounds were quantitated using the initial calibration.
7. All internal standard areas and retention times were within SOP acceptance limits as compared to the corresponding calibration verification standard.
8. The sample was analyzed using a 10ml purge volume. A secondary dilution was required on the sample for target compounds. The results and reporting limits were adjusted to account for the dilutions performed.



Michael Kras
GC/MS Dept.

6/9/06
Date

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SAMPLE INFORMATION

Date: 06/09/2006

Job Number.: 246777

Customer...: Environmental Resource Management
Attn.....: Alan Cork

Project Number.....: 20006438
Customer Project ID....: SECO
Project Description....: Seco

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
246777-1	STRIPPER DISCHARGE	Water	05/25/2006	19:00	05/27/2006	09:00

STL Chicago is part of Severn Trent Laboratories, Inc.

LABORATORY TEST RESULTS					
Job Number: 246777		Date: 06/09/2006			
CUSTOMER: Environmental Resource Management		PROJECT: SECO	ATTN: Alan Cork		
Customer Sample ID: STRIPPER DISCHARGE				Laboratory Sample ID: 246777-1	
Date Sampled.....: 05/25/2006				Date Received.....: 05/27/2006	
Time Sampled.....: 19:00				Time Received.....: 09:00	
Sample Matrix.....: Water					
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE
8260B	Volatile Organics				TECH
	Dichlorodifluoromethane	ND	1.0	ug/L	06/06/06 jdn
	Chloromethane	ND	1.0	ug/L	06/06/06 jdn
	Vinyl chloride	ND	1.0	ug/L	06/06/06 jdn
	Bromomethane	ND	1.0	ug/L	06/06/06 jdn
	Chloroethane	ND	1.0	ug/L	06/06/06 jdn
	Trichlorofluoromethane	ND	1.0	ug/L	06/06/06 jdn
	1,1-Dichloroethene	ND	1.0	ug/L	06/06/06 jdn
	Carbon disulfide	ND	5.0	ug/L	06/06/06 jdn
	Acetone	ND	5.0	ug/L	06/06/06 jdn
	Methylene chloride	ND	1.0	ug/L	06/06/06 jdn
	trans-1,2-Dichloroethene	1.8	1.0	ug/L	06/06/06 jdn
	Methyl-tert-butyl-ether (MTBE)	ND	1.0	ug/L	06/06/06 jdn
	1,1-Dichloroethane	ND	1.0	ug/L	06/06/06 jdn
	2,2-Dichloropropane	ND	1.0	ug/L	06/06/06 jdn
	cis-1,2-Dichloroethene	400	10	ug/L	06/06/06 jdn
	2-Butanone (MEK)	ND	5.0	ug/L	06/06/06 jdn
	Bromochloromethane	ND	1.0	ug/L	06/06/06 jdn
	Chloroform	ND	1.0	ug/L	06/06/06 jdn
	1,1,1-Trichloroethane	ND	1.0	ug/L	06/06/06 jdn
	1,1-Dichloropropene	ND	1.0	ug/L	06/06/06 jdn
	Carbon tetrachloride	ND	1.0	ug/L	06/06/06 jdn
	Benzene	ND	1.0	ug/L	06/06/06 jdn
	1,2-Dichloroethane	ND	1.0	ug/L	06/06/06 jdn
	Trichloroethene	65	1.0	ug/L	06/06/06 jdn
	1,2-Dichloropropane	ND	1.0	ug/L	06/06/06 jdn
	Dibromomethane	ND	1.0	ug/L	06/06/06 jdn
	Bromodichloromethane	ND	1.0	ug/L	06/06/06 jdn
	cis-1,3-Dichloropropene	ND	1.0	ug/L	06/06/06 jdn
	4-Methyl-2-pentanone (MIBK)	ND	5.0	ug/L	06/06/06 jdn
	Toluene	ND	1.0	ug/L	06/06/06 jdn
	trans-1,3-Dichloropropene	ND	1.0	ug/L	06/06/06 jdn
	1,1,2-Trichloroethane	ND	1.0	ug/L	06/06/06 jdn
	Tetrachloroethene	ND	1.0	ug/L	06/06/06 jdn
	1,3-Dichloropropane	ND	1.0	ug/L	06/06/06 jdn
	2-Hexanone	ND	5.0	ug/L	06/06/06 jdn
	Dibromochloromethane	ND	1.0	ug/L	06/06/06 jdn
	1,2-Dibromoethane (EDB)	ND	1.0	ug/L	06/06/06 jdn
	Chlorobenzene	ND	1.0	ug/L	06/06/06 jdn
	1,1,1,2-Tetrachloroethane	ND	1.0	ug/L	06/06/06 jdn
	Ethylbenzene	ND	1.0	ug/L	06/06/06 jdn
	m&p-Xylenes	ND	2.0	ug/L	06/06/06 jdn
	o-Xylene	ND	1.0	ug/L	06/06/06 jdn
	Styrene	ND	1.0	ug/L	06/06/06 jdn
	Bromoform	ND	1.0	ug/L	06/06/06 jdn
	Isopropylbenzene	ND	1.0	ug/L	06/06/06 jdn
	Bromobenzene	ND	1.0	ug/L	06/06/06 jdn
	1,1,2,2-Tetrachloroethane	ND	1.0	ug/L	06/06/06 jdn
	1,2,3-Trichloropropane	ND	1.0	ug/L	06/06/06 jdn

* In Description = Dry Wgt.

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LABORATORY TEST RESULTS								
Job Number: 246777		Date: 06/09/2006						
CUSTOMER: Environmental Resource Management		PROJECT: SECO		ATTN: Alan Cork				
Customer Sample ID: STRIPPER DISCHARGE				Laboratory Sample ID: 246777-1				
Date Sampled.....: 05/25/2006				Date Received.....: 05/27/2006				
Time Sampled.....: 19:00				Time Received.....: 09:00				
Sample Matrix.....: Water								
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH		
	n-Propylbenzene	ND	1.0	ug/L	06/06/06	jdn		
	2-Chlorotoluene	ND	1.0	ug/L	06/06/06	jdn		
	1,3,5-Trimethylbenzene	ND	1.0	ug/L	06/06/06	jdn		
	4-Chlorotoluene	ND	1.0	ug/L	06/06/06	jdn		
	tert-Butylbenzene	ND	1.0	ug/L	06/06/06	jdn		
	1,2,4-Trimethylbenzene	ND	1.0	ug/L	06/06/06	jdn		
	sec-Butylbenzene	ND	1.0	ug/L	06/06/06	jdn		
	1,3-Dichlorobenzene	ND	1.0	ug/L	06/06/06	jdn		
	p-Isopropyltoluene	ND	1.0	ug/L	06/06/06	jdn		
	1,4-Dichlorobenzene	ND	1.0	ug/L	06/06/06	jdn		
	n-Butylbenzene	ND	1.0	ug/L	06/06/06	jdn		
	1,2-Dichlorobenzene	ND	1.0	ug/L	06/06/06	jdn		
	1,2-Dibromo-3-chloropropane	ND	1.0	ug/L	06/06/06	jdn		
	1,2,4-Trichlorobenzene	ND	1.0	ug/L	06/06/06	jdn		
	Hexachlorobutadiene	ND	1.0	ug/L	06/06/06	jdn		
	Naphthalene	ND	1.0	ug/L	06/06/06	jdn		
	1,2,3-Trichlorobenzene	ND	1.0	ug/L	06/06/06	jdn		

* In Description = Dry Wgt.

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LABORATORY CHRONICLE					
Job Number: 246777		Date: 06/09/2006			
CUSTOMER: Environmental Resource Management		PROJECT: SECO		ATTN: Alan Cork	
Lab ID: 246777-1	Client ID: STRIPPER DISCHARGE	Date Recvd:	05/27/2006	Sample Date:	05/25/2006
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(\$)	DATE/TIME ANALYZED
5030B	5030 10 mL Purge Prep	1	182747		06/06/2006 1951
5030B	5030 10 mL Purge Prep	2	182747		06/06/2006 2013
8260B	Volatile Organics	1	182748	182747	06/06/2006 1951
8260B	Volatile Organics	1	182748	182747	06/06/2006 2013
					1.00000
					10.0000

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SURROGATE RECOVERIES REPORT

Job Number.: 246777

Report Date.: 06/09/2006

CUSTOMER: Environmental Resource Management PROJECT: SEC0 ATTN: Alan Cork

Method.....: Volatile Organics
Method Code...: 8260B

Test Matrix...: Water
Batch(s).....: 182748

Prep Batch..: 182747

Lab ID	DT	Sample ID	Date	12DCED	BRFLBE	DBRFLM	TOLD8
LCS			06/06/2006	95	115	104	113
MB			06/06/2006	99	111	104	112
246777- 1		STRIPPER DISCHARGE	06/06/2006	99	107	102	110
246777- 1	D1	STRIPPER DISCHARGE	06/06/2006	93	107	101	110

Test	Test Description	Limits
12DCED	1,2-Dichloroethane-d4 (surr)	62 - 127
BRFLBE	4-Bromofluorobenzene (surr)	67 - 132
DBRFLM	Dibromofluoromethane (surr)	77 - 119
TOLD8	Toluene-d8 (surr)	81 - 126

QUALITY CONTROL RESULTS

Job Number.: 246777

Report Date.: 06/09/2006

CUSTOMER: Environmental Resource Management

PROJECT: SECO

ATTN: Alan CoFK

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: 8260B

Method Description.: Volatile Organics

Equipment Code....: GCL16

Batch.....: 182748

Analyst...: jdn

LCS	Laboratory Control Sample	V06FGD0SA	182747-002	06/08/2006	0952
-----	---------------------------	-----------	------------	------------	------

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
Dichlorodifluoromethane	ug/L	27.154		25.000	1.000	U 109	%	24-171	
Chloromethane	ug/L	25.565		25.000	1.000	U 102	%	31-182	
Vinyl chloride	ug/L	30.228		25.000	1.000	U 121	%	52-134	
Bromomethane	ug/L	35.340		25.000	1.000	U 141	%	31-188	
Chloroethane	ug/L	28.592		25.000	1.000	U 114	%	58-148	
Trichlorofluoromethane	ug/L	27.700		25.000	1.000	U 111	%	54-142	
1,1-Dichloroethene	ug/L	20.160		25.000	1.000	U 81	%	51-136	
Carbon disulfide	ug/L	18.430		25.000	5.000	U 74	%	21-111	
Acetone	ug/L	14.286		25.000	5.000	U 57	%	14-177	
Methylene chloride	ug/L	19.922		25.000	1.000	U 80	%	64-127	
trans-1,2-Dichloroethene	ug/L	21.078		25.000	1.000	U 84	%	62-138	
Methyl-tert-butyl-ether (MTBE)	ug/L	19.145		25.000	1.000	U 77	%	55-142	
1,1-Dichloroethane	ug/L	21.665		25.000	1.000	U 87	%	70-124	
2,2-Dichloropropane	ug/L	26.034		25.000	1.000	U 104	%	68-127	
cis-1,2-Dichloroethene	ug/L	22.368		25.000	1.000	U 89	%	76-125	
2-Butanone (MEK)	ug/L	13.142		25.000	5.000	U 53	%	29-139	
Bromoform	ug/L	20.618		25.000	1.000	U 82	%	57-116	
Chloroform	ug/L	21.603		25.000	1.000	U 86	%	75-122	
1,1,1-Trichloroethane	ug/L	22.947		25.000	1.000	U 92	%	70-127	
1,1-Dichloropropene	ug/L	23.156		25.000	1.000	U 93	%	70-125	
Carbon tetrachloride	ug/L	22.476		25.000	1.000	U 90	%	64-132	
Benzene	ug/L	22.796		25.000	1.000	U 91	%	75-122	
1,2-Dichloroethane	ug/L	19.201		25.000	1.000	U 77	%	67-120	
Trichloroethene	ug/L	22.483		25.000	1.000	U 90	%	75-124	
1,2-Dichloropropane	ug/L	22.261		25.000	1.000	U 89	%	76-116	
Dibromomethane	ug/L	19.282		25.000	1.000	U 77	%	68-116	
Bromodichloromethane	ug/L	22.247		25.000	1.000	U 89	%	75-125	
cis-1,3-Dichloropropene	ug/L	21.449		26.000	1.000	U 82	%	72-115	
4-Methyl-2-pentanone (MIBK)	ug/L	17.726		25.000	5.000	U 71	%	39-137	
Toluene	ug/L	25.014		25.000	1.000	U 100	%	77-120	
trans-1,3-Dichloropropene	ug/L	18.286		24.000	1.000	U 76	%	68-119	
1,1,2-Trichloroethane	ug/L	19.768		25.000	1.000	U 79	%	63-127	
Tetrachloroethene	ug/L	26.745		25.000	1.000	U 107	%	70-125	
1,3-Dichloropropane	ug/L	20.855		25.000	1.000	U 83	%	72-118	
2-Hexanone	ug/L	16.893		25.000	5.000	U 68	%	36-144	
Dibromochloromethane	ug/L	21.015		25.000	1.000	U 84	%	73-116	
1,2-Dibromoethane (EDB)	ug/L	19.563		25.000	1.000	U 78	%	62-123	
Chlorobenzene	ug/L	23.638		25.000	1.000	U 95	%	76-116	
1,1,1,2-Tetrachloroethane	ug/L	23.314		25.000	1.000	U 93	%	77-120	
Ethylbenzene	ug/L	26.975		25.000	1.000	U 108	%	75-125	
m&p-Xylenes	ug/L	54.423		50.000	2.000	U 109	%	75-123	
o-Xylene	ug/L	27.589		25.000	1.000	U 110	%	76-121	
Styrene	ug/L	24.274		25.000	1.000	U 97	%	77-128	
Bromoform	ug/L	17.028		25.000	1.000	U 68	%	65-115	
Isopropylbenzene	ug/L	25.405		25.000	1.000	U 102	%	64-119	
Bromobenzene	ug/L	23.492		25.000	1.000	U 94	%	76-118	
1,1,2,2-Tetrachloroethane	ug/L	18.726		25.000	1.000	U 75	%	61-122	
1,2,3-Trichloropropane	ug/L	17.920		25.000	1.000	U 72	%	62-124	
n-Propylbenzene	ug/L	25.812		25.000	1.000	U 103	%	69-132	
2-Chlorotoluene	ug/L	26.224		25.000	1.000	U 105	%	70-127	

QUALITY CONTROL RESULTS

Job Number.: 246777

Report Date.: 06/09/2006

CUSTOMER: Environmental Resource Management

PROJECT: SECO

ATTN: Alan Cork

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
---------	-------------	------------	--------	-----------------	------	------

LCS	Laboratory Control Sample	V06FO6DSA	182747-002		06/06/2006	0952
-----	---------------------------	-----------	------------	--	------------	------

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
1,3,5-Trimethylbenzene	ug/L	25.827		25.000	1.000	U 103	%	70-132	
4-Chlorotoluene	ug/L	26.187		25.000	1.000	U 105	%	70-126	
tert-Butylbenzene	ug/L	26.212		25.000	1.000	U 105	%	70-133	
1,2,4-Trimethylbenzene	ug/L	25.190		25.000	1.000	U 101	%	71-131	
sec-Butylbenzene	ug/L	26.351		25.000	1.000	U 105	%	70-134	
1,3-Dichlorobenzene	ug/L	24.251		25.000	1.000	U 97	%	71-120	
p-Isopropyltoluene	ug/L	27.639		25.000	1.000	U 111	%	66-130	
1,4-Dichlorobenzene	ug/L	22.783		25.000	1.000	U 91	%	70-118	
n-Butylbenzene	ug/L	27.304		25.000	1.000	U 109	%	64-142	
1,2-Dichlorobenzene	ug/L	23.588		25.000	1.000	U 94	%	72-118	
1,2-Dibromo-3-chloropropane	ug/L	16.026		25.000	1.000	U 64	%	57-119	
1,2,4-Trichlorobenzene	ug/L	25.907		25.000	1.000	U 104	%	60-132	
Hexachlorobutadiene	ug/L	30.330		25.000	1.000	U 121	%	63-145	
Naphthalene	ug/L	19.737		25.000	1.000	U 79	%	57-128	
1,2,3-Trichlorobenzene	ug/L	23.512		25.000	1.000	U 94	%	66-124	

QUALITY CONTROL RESULTS

Job Number.: 246777

Report Date.: 06/09/2006

CUSTOMER: Environmental Resource Management

PROJECT: SEDO

ATTN: Alan Cork

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
---------	-------------	------------	--------	-----------------	------	------

Test Method.....: 8260B
 Method Description.: Volatile Organics

Equipment Code....: GCL16
 Batch.....: 182748

Analyst...: jdn

MB	Method Blank	182747-001	06/09/2006 .0931
----	--------------	------------	------------------

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
Dichlorodifluoromethane	ug/L	1.000	U						
Chloromethane	ug/L	1.000	U						
Vinyl chloride	ug/L	1.000	U						
Bromomethane	ug/L	1.000	U						
Chloroethane	ug/L	1.000	U						
Trichlorofluoromethane	ug/L	1.000	U						
1,1-Dichloroethene	ug/L	1.000	U						
Carbon disulfide	ug/L	5.000	U						
Acetone	ug/L	5.000	U						
Methylene chloride	ug/L	1.000	U						
trans-1,2-Dichloroethene	ug/L	1.000	U						
Methyl-tert-butyl-ether (MTBE)	ug/L	1.000	U						
1,1-Dichloroethane	ug/L	1.000	U						
2,2-Dichloropropane	ug/L	1.000	U						
cis-1,2-Dichloroethene	ug/L	1.000	U						
2-Butanone (MEK)	ug/L	5.000	U						
Bromoform	ug/L	1.000	U						
1,1,1-Trichloroethane	ug/L	1.000	U						
1,1-Dichloropropene	ug/L	1.000	U						
Carbon tetrachloride	ug/L	1.000	U						
Benzene	ug/L	1.000	U						
1,2-Dichloroethane	ug/L	1.000	U						
Trichloroethene	ug/L	1.000	U						
1,2-Dichloropropane	ug/L	1.000	U						
Dibromomethane	ug/L	1.000	U						
Bromodichloromethane	ug/L	1.000	U						
cis-1,3-Dichloropropene	ug/L	1.000	U						
4-Methyl-2-pentanone (MIBK)	ug/L	5.000	U						
Toluene	ug/L	1.000	U						
trans-1,3-Dichloropropene	ug/L	1.000	U						
1,1,2-Trichloroethane	ug/L	1.000	U						
Tetrachloroethene	ug/L	1.000	U						
1,3-Dichloropropane	ug/L	1.000	U						
2-Hexanone	ug/L	5.000	U						
Dibromochloromethane	ug/L	1.000	U						
1,2-Dibromoethane (EDB)	ug/L	1.000	U						
Chlorobenzene	ug/L	1.000	U						
1,1,1,2-Tetrachloroethane	ug/L	1.000	U						
Ethylbenzene	ug/L	1.000	U						
m&p-Xylenes	ug/L	2.000	U						
o-Xylene	ug/L	1.000	U						
Styrene	ug/L	1.000	U						
Bromoform	ug/L	1.000	U						
Isopropylbenzene	ug/L	1.000	U						
Bromobenzene	ug/L	1.000	U						
1,1,2,2-Tetrachloroethane	ug/L	1.000	U						
1,2,3-Trichloropropane	ug/L	1.000	U						
n-Propylbenzene	ug/L	1.000	U						
2-Chlorotoluene	ug/L	1.000	U						

QUALITY CONTROL RESULTS

Job Number.: 246777

Report Date.: 06/09/2006

CUSTOMER: Environmental Resource Management PROJECT: SEC0 ATTN: Alan Cork

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
MB	Method Blank		182747-001		06/06/2006	0931

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
1,3,5-Trimethylbenzene	ug/L	1.000	U						
4-Chlorotoluene	ug/L	1.000	U						
tert-Butylbenzene	ug/L	1.000	U						
1,2,4-Trimethylbenzene	ug/L	1.000	U						
sec-Butylbenzene	ug/L	1.000	U						
1,3-Dichlorobenzene	ug/L	1.000	U						
p-Isopropyltoluene	ug/L	1.000	U						
1,4-Dichlorobenzene	ug/L	1.000	U						
n-Butylbenzene	ug/L	1.000	U						
1,2-Dichlorobenzene	ug/L	1.000	U						
1,2-Dibromo-3-chloropropane	ug/L	1.000	U						
1,2,4-Trichlorobenzene	ug/L	1.000	U						
Hexachlorobutadiene	ug/L	1.000	U						
Naphthalene	ug/L	1.000	U						
1,2,3-Trichlorobenzene	ug/L	1.000	U						

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Dates: 06/09/2006

REPORT COMMENTS

- 1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
- 2) Soil, sediment and sludge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.
- 3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
- 4) The test results for the noted analytical method(s) meet the requirements of NELAC. Lab Cert. ID# 100201
- 5) According to 40CFR Part 136.3, pH, Chlorine Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.

Glossary of flags, qualifiers and abbreviations (any number of which may appear in the report)

Inorganic Qualifiers (Q-Column)

- U Analyte was not detected at or above the stated limit.
- < Not detected at or above the reporting limit.
- J Result is less than the RL, but greater than or equal to the method detection limit.
- B Result is less than the CRDL/RL, but greater than or equal to the IDL/MDL.
- S Result was determined by the Method of Standard Additions.
- F AFCEE: Result is less than the RL, but greater than or equal to the method detection limit.

Inorganic Flags (Flag Column)

- ICV,CCV,ICB,CCB,ISA,ISB,CRI,CRA,MRL: Instrument related QC exceed the upper or lower control limits.
- * LCS, LCD, MD: Batch QC exceeds the upper or lower control limits.
- + MSA correlation coefficient is less than 0.995.
- 4 MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
- E SD: Serial dilution exceeds the control limits.
- H MB, EB1, EB2, EB3: Batch QC is greater than reporting limit or had a negative instrument reading lower than the absolute value of the reporting limit.
- N MS, MSD: Spike recovery exceeds the upper or lower control limits.
- W AS(GFAA) Post-digestion spike was outside 85-115% control limits.

Organic Qualifiers (Q - Column)

- U Analyte was not detected at or above the stated limit.
- ND Compound not detected.
- J Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).
- Q Result was qualitatively confirmed, but not quantified.
- C Pesticide identification was confirmed by GC/MS.
- Y The chromatographic response resembles a typical fuel pattern.
- Z The chromatographic response does not resemble a typical fuel pattern.
- E Result exceeded calibration range, secondary dilution required.
- F AFCEE:Result is an estimated value below the reporting limit or a tentatively identified compound (TIC)

Organic Flags (Flags Column)

- B MB: Batch QC is greater than reporting limit.
- * LCS, LCD, ELC, ELD, CV, MS, MSD, Surrogate: Batch QC exceeds the upper or lower control limits.
- EB1, EB2, EB3, MLE: Batch QC is greater than reporting Limit
- A Concentration exceeds the instrument calibration range
- a Concentration is below the method Reporting Limit (RL)
- B Compound was found in the blank and sample.
- D Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a D.
- H Alternate peak selection upon analytical review
- I Indicates the presence of an interference, recovery is not calculated.
- M Manually integrated compound.
- P The lower of the two values is reported when the % difference between the results of two GC columns is

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 06/09/2006

greater than 25%.

Abbreviations

AS	Post Digestion Spike (GFAA Samples - See Note 1 below)
Batch	Designation given to identify a specific extraction, digestion, preparation set, or analysis set
CAP	Capillary Column CCB Continuing Calibration Blank
CCV	Continuing Calibration Verification
CF	Confirmation analysis of original
C1	Confirmation analysis of A1 or D1
C2	Confirmation analysis of A2 or D2
C3	Confirmation analysis of A3 or D3
CRA	Low Level Standard Check - GFAA; Mercury
CRI	Low Level Standard Check - ICP
CV	Calibration Verification Standard
Dil Fac	Dilution Factor - Secondary dilution analysis
D1	Dilution 1
D2	Dilution 2
D3	Dilution 3
DLFac	Detection Limit Factor
DSH	Distilled Standard - High Level
DSL	Distilled Standard - Low Level
DSM	Distilled Standard - Medium Level
EB1	Extraction Blank 1
EB2	Extraction Blank 2
EB3	DI Blank
ELC	Method Extracted LCS
ELD	Method Extracted LCD
ICAL	Initial calibration
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
ISA	Interference Check Sample A - ICAP
ISB	Interference Check Sample B - ICAP
Job No.	The first six digits of the sample ID which refers to a specific client, project and sample group
Lab ID	An 8 number unique laboratory identification
LCD	Laboratory Control Standard Duplicate
LCS	Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest
MB	Method Blank or (PB) Preparation Blank
MD	Method Duplicate
MDL	Method Detection Limit
MLE	Medium Level Extraction Blank
MRL	Method Reporting Limit Standard
MSA	Method of Standard Additions
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not Detected
PREPF	Preparation factor used by the Laboratory's Information Management System (LIMS)
PDS	Post Digestion Spike (ICAP)
RA	Re-analysis of original
A1	Re-analysis of D1
A2	Re-analysis of D2
A3	Re-analysis of D3
RD	Re-extraction of dilution
RE	Re-extraction of original
RC	Re-extraction Confirmation
RL	Reporting Limit
RPD	Relative Percent Difference of duplicate (unrounded) analyses
RRF	Relative Response Factor
RT	Retention Time

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 06/09/2006

RTW Retention Time Window Sample ID A 9 digit number unique for each sample, the first six digits are referred as the job number

SCB Seeded Control Blank

SD Serial Dilution (Calculated when sample concentration exceeds 50 times the MDL)

UCB Unseeded Control Blank

SSV Second Source Verification Standard

SLCS Solid Laboratory Control Standard(LCS)

PHC pH Calibration Check LCSP pH Laboratory Control Sample

LCDP pH Laboratory Control Sample Duplicate

MDPH pH Sample Duplicate

MDFP Flashpoint Sample Duplicate

LCFP Flashpoint LCS

G1 Gelex Check Standard Range 0-1

G2 Gelex Check Standard Range 1-10

G3 Gelex Check Standard Range 10-100

G4 Gelex Check Standard Range 100-1000

Note 1: The Post Spike Designation on Batch QC for GFAA is designated with an "S" added to the current abbreviation used. EX. LCS S=LCS Post Spike (GFAA); MSS=MS Post Spike (GFAA)

Note 2: The MD calculates an absolute difference (A) when the sample concentration is less than 5 times the reporting limit. The control limit is represented as +/- the RL.

SEVERN
TRENT

STL

STL Chicago
2417 Bond Street
University Park, IL 60466
Phone: 708-534-5200
Fax: 708-534-5211

Report To:	BU To:	Shaded Areas For Internal Use Only
Contact: <u>Mr Alan Cork</u>	Contact: _____	Lab Lot# <u>246777</u>
Company: <u>ERIN</u>	Company: _____	Sample Received <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Address: <u>1630 Heritage Landing Dr</u> <u>St. Charles MO 63303</u>	Address: _____	Sample Integrity <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Phone: <u>(636) 928-0300 Ext 226</u>	Phone: _____	Sample Intact <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
Fax: <u>(636) 928-2050</u>	Fax: _____	Sample Received Date <u>10/10/00</u>
E-Mail: <u>alan.cork@erinn.com</u>	PO#: _____ Quote: _____	Comments: _____

Jesse B. Johnson
RELINQUISHER BY _____ COMPANY _____
RELINQUISHER BY _____ COMPANY _____

DATE 3/26/06 TIME 1735
DATE 05-26-06 TIME 1736

RECEIVED BY	<i>John Doe</i>	COMPANY	SAC SR
RECEIVED BY	<i>WT</i>	COMPANY	SL

DATE 05-26-06 TIME 715
DATE 5/27/06 TIME 090

Matrix Key	
WW = Wastewater	SE = Sediment
W = Water	SO = Solid
S = Soil	DS = Drum Solid
SL = Sludge	DL = Drum Liquid
MS = Miscellaneous	L = Leachate
OL = Oil	WI = Wipe
A = Air	O =

Container Key

1. Plastic
2. VOA Vial
3. Sterile Plastic
4. Amber Glass
5. Widemouth Glass
6. Other

Preservative Key

1. HCl, Cool to 4°
2. H₂SO₄, Cool to 4°
3. HNO₃, Cool to 4°
4. NaOH, Cool to 4°
5. NaOH/Zn, Cool to 4°
6. Cool to 4°
7. None

COMMENTS Delivery to STL Chicago Lab

Date Received 5/27/06
Courier: FX Hand Delivered
Bill of Lading see attach

MISSOURI DEPARTMENT OF NATURAL RESOURCES

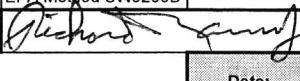
DIVISION OF ENVIRONMENTAL QUALITY

NPDES MONITORING REPORT FOR NON-MUNICIPAL WASTEWATER DISCHARGES

SECOND QUARTER 2006 RESAMPLE

INSTRUCTIONS:

1. Mail completed report to the MDNR St. Louis Regional Office, 7545 South Lindbergh, Suite 210, St. Louis, MO 63125
2. Report must be signed by the owner and by the analyst. Report should be typed or neatly printed.
3. Part A of the permit specifies the parameters to be monitored, frequency of monitoring and frequency of reporting results. If quarterly reports are required, they are due on April 28, July 28, October 28, and January 28, each report covering the 3-month period not including the reporting month. See the permit for reporting dates other than quarterly.
4. Report results of all analyses, even if performed more frequently than required by Part A of the permit.
5. File a report even if discharge is intermittent and no discharge occurred during the monitoring period. Complete the identification section, write "ND" in the appropriate columns for the dates the facility was checked, and sign the report. NOTE: If a discharge occurs at any time during the monitoring period, it must be reported.
6. Under "Sample Type" indicate whether sample analyzed was: (a) grab sample; (b) 24-hour composite sample; or (c) modified composite sample. NOTE: See permit for type of sample required for each parameter.
7. Under "Sample Type" for flow indicate whether figures shown are based on (a) instantaneous measurements or (b) actual 24-hour measured flow. Figure recorded is to represent the total 24-hour flow for the data shown or a reasonable estimate.
8. Indicate whether samples were collected by owner or by personnel of the lab performing the analyses.

Facility Name:	Former SECO Products Facility Site		Permit Number:	MO-0129313	County:	Franklin	Owner:	Hussmann Corp.	Facility Type:	GW Remediation Systm
Required Frequency of Monitoring:			Quarterly	This Report Covers the Period:		April 1, 2006	through	June 30, 2006	REMARKS & COMMENTS (Record, as appropriate, such information as method of preservation, methods of sample collection, abnormal age of sample, explanation of unusual results, etc.)	
Dates Sampled			6/12/2006	6/12/2006	6/12/2006					
Time Sampled			1540	1538	1537	1536				
Sample Collected By			M Bates-ERM	M Bates-ERM	M Bates-ERM	M Bates-ERM				
Analyses Date			6/16/2006	6/12/2006	6/12/2006	6/12/2006				
Parameters	Permitted Final Limits		RECORD ACTUAL RESULTS OF ANALYSIS-DO NOT AVERAGE				Sample Type	Sample Analytical Method		
	Daily Max	Monthly Avg								
Flow (mgpd)	*	*	0.029512	-	-	-	24-Hr Est	Direct Measurement	8 Recovery Wells Were Operational	
BOD (mg/L)	NA	NA	NA	NA	NA	NA	-	-		
TSS (mg/L)	NA	NA	NA	NA	NA	NA	-	-		
pH (Std. Units)	6.0-9.0	6.0-9.0	-	7.06	7.06	7.05	Grab	Field pH Meter	Field Measurement	
Fecal Coliform/100 ml	NA	NA	NA	NA	NA	NA	-	-		
1,2-dichloroethylene (mg/L)	0.200	0.100	3.262	-	-	-	Grab	EPA Method SW8260B	Preservation by HCL & Cool to 4° C	
1,1-dichloroethylene (mg/L)	0.008	0.008	ND (<0.005)	-	-	-	Grab	EPA Method SW8260B	Preservation by HCL & Cool to 4° C	
trichloroethylene (mg/L)	0.16	0.16	1.9	-	-	-	Grab	EPA Method SW8260B	Preservation by HCL & Cool to 4° C	
v vinyl chloride (mg/L)	*	*	0.088	-	-	-	Grab	EPA Method SW8260B	Preservation by HCL & Cool to 4° C	
Analyses Performed By:	Severn Trent STL, 13715 Rider Trail North, Earth City, MO 63045				Signature of Analyst:		 /Rich Mannz, STL			
Report Approved By Owner:	 CRAIG STEVALL, ANALYST Global Environmental, Health, & Safety						Date:	07/26/06		
Notes:										
* = Monitoring requirement only										
NA = Not applicable/not required to be analyzed										
ND = Not detected above the detection limit indicated										
"-" = not analyzed										
J = analyte is reported as an estimated value below the method reporting limit										
Based on MDNR Form MO 780-1307 (7-01)										

SEVERN
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University Park, IL 60466

Tel: 708 534 5200 Fax: 708 534 5211
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SEVERN TRENT LABORATORIES ANALYTICAL REPORT

JOB NUMBER: 247195

Prepared For:

Environmental Resource Management
1630 Heritage Landing Drive
Suite 100
St. Charles, MO 63303

Project: Seco

Attention: Alan Cork

Date: 06/29/2006

Rich Mannz
Signature

6/29/06
Date

Name: Rich Mannz

STL Chicago
2417 Bond Street
University Park, IL 60466

Title: Project Manager

E-Mail: rmannz@stl-inc.com

PHONE: (708) 534-5200
FAX.: (708) 534-5211

This Report Contains (16) Pages

Severn Trent Laboratories Chicago
GC/MS Case Narrative

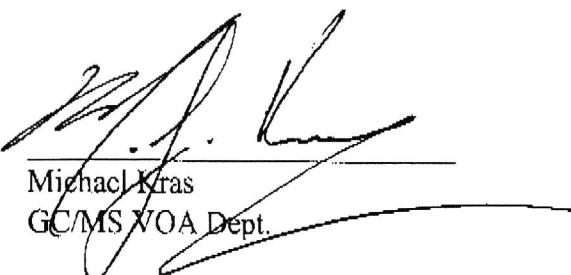
Environmental Resource Management

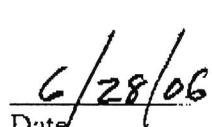
SECO

JOB Number: 247195

VOA DATA:

1. The original sample analysis was performed within the required hold time from the date of collection. The sample required a dilution for target compounds which was performed 1 day after the 14 day hold time.
2. All Method Blank target compounds were below reporting limits.
3. The LCS (Laboratory Control Sample) samples had all controlled spike recoveries within the in-house generated QC limits.
4. Matrix Spike/Matrix Spike Duplicate analyses were not performed on this sample set.
5. The volatile sample had all surrogate recoveries within the in-house generated QC limits.
6. The sample was prepared using Method 5030B and analyzed following SW846 Method 8260B and 8000B. All calibration criteria are met per method or SOP (for minimum R values for certain compounds). The low point in the initial calibration verifies the base reporting limits. The target compounds were quantitated using the initial calibration.
7. The volatile sample had all internal standard areas and retention times within the SOP acceptance limits as compared to the corresponding calibration verification standard.
8. The water sample was analyzed using a 10mL purge volume. Initial dilutions and secondary dilutions were required on the sample due to sample matrix. The results and reporting limits were adjusted for the dilutions performed.


Michael Kras
GC/MS VOA Dept.


Date

STL Chicago is part of Severn Trent Laboratories, Inc.

SAMPLE INFORMATION

Date: 06/29/2006

Job Number.: 247195

Project Number.....: 20006438

Customer...: Environmental Resource Management
Attn.....: Alan Cork

Customer Project ID....: SECO
Project Description....: Seco

laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
247195-1	STRIPPER TOWER DISCHARGE	Water	06/12/2006	15:40	06/16/2006	10:00

STL Chicago is part of Severn Trent Laboratories, Inc.

LABORATORY TEST RESULTS

Job Number: 247195

Date: 06/29/2006

CUSTOMER: Environmental Resource Management

PROJECT: SEC0

ATTN: AL2D-FABK

Customer Sample ID: STRIPPER TOWER DISCHARGE
Date Sampled.....: 06/12/2006
Time Sampled.....: 15:40
Sample Matrix....: Water

Laboratory Sample ID: 247195-1
Date Received.....: 06/16/2006
Time Received.....: 10:00

TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE	RESULT	REPORTING LIMIT	UNITS	DATE	TECH
8260B	Volatile Organics						
	Dichlorodifluoromethane	ND	10	ug/L	06/23/06	jdn	
	Chloromethane	ND	10	ug/L	06/23/06	jdn	
	Vinyl chloride	88	10	ug/L	06/23/06	jdn	
	Bromomethane	ND	10	ug/L	06/23/06	jdn	
	Chloroethane	ND	10	ug/L	06/23/06	jdn	
	Trichlorofluoromethane	ND	10	ug/L	06/23/06	jdn	
	1,1-Dichloroethene	ND	10	ug/L	06/23/06	jdn	
	Carbon disulfide	ND	50	ug/L	06/23/06	jdn	
	Acetone	ND	50	ug/L	06/23/06	jdn	
	Methylene chloride	ND	10	ug/L	06/23/06	jdn	
	trans-1,2-Dichloroethene	62	10	ug/L	06/23/06	jdn	
	Methyl-tert-butyl-ether (MTBE)	ND	10	ug/L	06/23/06	jdn	
	1,1-Dichloroethane	ND	10	ug/L	06/23/06	jdn	
	2,2-Dichloropropane	ND	10	ug/L	06/23/06	jdn	
	cis-1,2-Dichloroethene	3200	100	ug/L	06/27/06	djd	
	2-Butanone (MEK)	ND	50	ug/L	06/23/06	jdn	
	Bromoform	ND	10	ug/L	06/23/06	jdn	
	Chloroform	ND	10	ug/L	06/23/06	jdn	
	1,1,1-Trichloroethane	ND	10	ug/L	06/23/06	jdn	
	1,1-Dichloropropene	ND	10	ug/L	06/23/06	jdn	
	Carbon tetrachloride	ND	10	ug/L	06/23/06	jdn	
	Benzene	ND	10	ug/L	06/23/06	jdn	
	1,2-Dichloroethane	ND	10	ug/L	06/23/06	jdn	
	Trichloroethene	1900	100	ug/L	06/27/06	djd	
	1,2-Dichloropropane	ND	10	ug/L	06/23/06	jdn	
	Dibromomethane	ND	10	ug/L	06/23/06	jdn	
	Bromodichloromethane	ND	10	ug/L	06/23/06	jdn	
	cis-1,3-Dichloropropene	ND	10	ug/L	06/23/06	jdn	
	4-Methyl-2-pentanone (MIBK)	ND	50	ug/L	06/23/06	jdn	
	Toluene	ND	10	ug/L	06/23/06	jdn	
	trans-1,3-Dichloropropene	ND	10	ug/L	06/23/06	jdn	
	1,1,2-Trichloroethane	ND	10	ug/L	06/23/06	jdn	
	Tetrachloroethene	ND	10	ug/L	06/23/06	jdn	
	1,3-Dichloropropane	ND	10	ug/L	06/23/06	jdn	
	2-Hexahone	ND	10	ug/L	06/23/06	jdn	
	Dibromochloromethane	ND	50	ug/L	06/23/06	jdn	
	1,2-Dibromoethane (EDB)	ND	10	ug/L	06/23/06	jdn	
	Chlorobenzene	ND	10	ug/L	06/23/06	jdn	
	1,1,1,2-Tetrachloroethane	ND	10	ug/L	06/23/06	jdn	
	Ethylbenzene	ND	10	ug/L	06/23/06	jdn	
	m&p-Xylenes	ND	20	ug/L	06/23/06	jdn	
	o-Xylene	ND	10	ug/L	06/23/06	jdn	
	Styrene	ND	10	ug/L	06/23/06	jdn	
	Bromoform	ND	10	ug/L	06/23/06	jdn	
	Isopropylbenzene	ND	10	ug/L	06/23/06	jdn	
	Bromobenzene	ND	10	ug/L	06/23/06	jdn	
	1,1,2,2-Tetrachloroethane	ND	10	ug/L	06/23/06	jdn	
	1,2,3-Trichloropropane	ND	10	ug/L	06/23/06	jdn	

* In Description = Dry Wgt.

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LABORATORY TEST RESULTS					
Job Number: 247195					Date: 06/29/2006
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE
	n-Propylbenzene	ND	10	ug/L	06/23/06 jdn
	2-Chlorotoluene	ND	10	ug/L	06/23/06 jdn
	1,3,5-Trimethylbenzene	ND	10	ug/L	06/23/06 jdn
	4-Chlorotoluene	ND	10	ug/L	06/23/06 jdn
	tert-Butylbenzene	ND	10	ug/L	06/23/06 jdn
	1,2,4-Trimethylbenzene	ND	10	ug/L	06/23/06 jdn
	sec-Butylbenzene	ND	10	ug/L	06/23/06 jdn
	1,3-Dichlorobenzene	ND	10	ug/L	06/23/06 jdn
	p-Isopropyltoluene	ND	10	ug/L	06/23/06 jdn
	1,4-Dichlorobenzene	ND	10	ug/L	06/23/06 jdn
	n-Butylbenzene	ND	10	ug/L	06/23/06 jdn
	1,2-Dichlorobenzene	ND	10	ug/L	06/23/06 jdn
	1,2-Dibromo-3-chloropropane	ND	10	ug/L	06/23/06 jdn
	1,2,4-Trichlorobenzene	ND	10	ug/L	06/23/06 jdn
	Hexachlorobutadiene	ND	10	ug/L	06/23/06 jdn
	Naphthalene	ND	10	ug/L	06/23/06 jdn
	1,2,3-Trichlorobenzene	ND	10	ug/L	06/23/06 jdn

* In Description = Dry Wgt.

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LABORATORY CHRONICLE					
Job Number: 247195		Date: 06/29/2006			
CUSTOMER: Environmental Resource Management		PROJECT: SECO		ATTN: Alan Cork	
Lab ID: 247195-1	Client ID: STRIPPER TOWER DISCHARGE	Date Recvd: 06/16/2006	Sample Date: 06/12/2006		
METHOD	DESCRIPTION	RUN#	BATCH#	PREP BT #(S)	DATE/TIME ANALYZED
5030B	5030 10 mL Purge Prep	1	184087		06/23/2006 1555
5030B	5030 10 mL Purge Prep	2	184279		06/27/2006 1125
5030B	5030 10 mL Purge Prep	3	184279		06/27/2006 1102
8260B	Volatile Organics	1	184088	184087	06/23/2006 1555
8260B	Volatile Organics	1	184283	184279	06/27/2006 1125
					10.0000
					100.000

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SURROGATE RECOVERIES REPORT

Job Number.: 247195

Report Date.: 06/29/2006

CUSTOMER: Environmental Resource Management

PROJECT: SECO

ATTN: Alan Cork

Method.....: Volatile Organics
Method Code...: 8260B

Test Matrix...: Water
Batch(s).....: 184088

Prep Batch..: 184087

Lab ID	DT	Sample ID	Date	12DCED	BRFLBE	DBRFLM	TOLD8
LCS			06/23/2006	102	105	101	100
MB			06/23/2006	108	90	104	98
247195- 1		STRIPPER TOWER DISCHARGE	06/23/2006	96	75	112	85
Test	Test Description	Limits					
12DCED	1,2-Dichloroethane-d4 (surr)	62 - 127					
BRFLBE	4-Bromofluorobenzene (surr)	67 - 132					
DBRFLM	Dibromofluoromethane (surr)	77 - 119					
TOLD8	Toluene-d8 (surr)	81 - 126					

Method.....: Volatile Organics
Method Code...: 8260B

Test Matrix...: Water
Batch(s).....: 184283

Prep Batch..: 184279

Lab ID	DT	Sample ID	Date	12DCED	BRFLBE	DBRFLM	TOLD8
LCS			06/27/2006	105	104	101	103
MB			06/27/2006	101	108	99	99
247195- 1		D1 STRIPPER TOWER DISCHARGE	06/27/2006	104	105	99	100
Test	Test Description	Limits					
12DCED	1,2-Dichloroethane-d4 (surr)	62 - 127					
BRFLBE	4-Bromofluorobenzene (surr)	67 - 132					
DBRFLM	Dibromofluoromethane (surr)	77 - 119					
TOLD8	Toluene-d8 (surr)	81 - 126					

QUALITY CONTROL RESULTS							
Job Number.: 247195		Report Date.: 06/29/2006					
CUSTOMER: Environmental Resource Management		PROJECT: SECO		ATTN: Alan Cork			
QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time	
Test Method.....: 8260B		Equipment Code....: GCL16		Analyst...: jdn			
Method Description.: Volatile Organics		Batch.....: 184088					
LCS	Laboratory Control Sample	V06F23DSA	184087-002			06/23/2006	1242
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*
Dichlorodifluoromethane	ug/L	25.073		25.000	1.000	U 100	% 24-171
Chloromethane	ug/L	24.560		25.000	1.000	U 98	% 31-182
Vinyl chloride	ug/L	25.129		25.000	1.000	U 101	% 52-134
Bromomethane	ug/L	28.512		25.000	1.000	U 114	% 31-188
Chloroethane	ug/L	25.678		25.000	1.000	U 103	% 58-148
Trichlorofluoromethane	ug/L	25.204		25.000	1.000	U 101	% 54-142
1,1-Dichloroethene	ug/L	23.325		25.000	1.000	U 93	% 51-136
Carbon disulfide	ug/L	23.410		25.000	5.000	U 94	% 21-111
Acetone	ug/L	24.832		25.000	5.000	U 99	% 14-177
Methylene chloride	ug/L	24.176		25.000	1.000	U 97	% 64-127
trans-1,2-Dichloroethene	ug/L	23.288		25.000	1.000	U 93	% 62-138
Methyl-tert-butyl-ether (MTBE)	ug/L	22.763		25.000	1.000	U 91	% 55-142
1,1-Dichloroethane	ug/L	24.056		25.000	1.000	U 96	% 70-124
2,2-Dichloropropane	ug/L	27.003		25.000	1.000	U 108	% 68-127
2-Butanone (MEK)	ug/L	27.031		25.000	5.000	U 108	% 29-139
Bromochloromethane	ug/L	22.981		25.000	1.000	U 92	% 57-116
Chloroform	ug/L	24.074		25.000	1.000	U 96	% 75-122
1,1,1-Trichloroethane	ug/L	24.258		25.000	1.000	U 97	% 70-127
1,1-Dichloropropene	ug/L	24.841		25.000	1.000	U 99	% 70-125
Carbon tetrachloride	ug/L	23.111		25.000	1.000	U 92	% 64-132
Benzene	ug/L	23.678		25.000	1.000	U 95	% 75-122
1,2-Dichloroethane	ug/L	23.238		25.000	1.000	U 93	% 67-120
1,2-Dichloropropane	ug/L	24.122		25.000	1.000	U 96	% 76-116
Dibromomethane	ug/L	23.374		25.000	1.000	U 93	% 68-116
Bromodichloromethane	ug/L	24.413		25.000	1.000	U 98	% 75-125
cis-1,3-Dichloropropene	ug/L	21.906		26.000	1.000	U 84	% 72-115
4-Methyl-2-pentanone (MIBK)	ug/L	24.268		25.000	5.000	U 97	% 39-137
Toluene	ug/L	24.025		25.000	1.000	U 96	% 77-120
trans-1,3-Dichloropropene	ug/L	19.974		24.000	1.000	U 83	% 68-119
1,1,2-Trichloroethane	ug/L	25.242		25.000	1.000	U 101	% 63-127
Tetrachloroethene	ug/L	24.163		25.000	1.000	U 97	% 70-125
1,3-Dichloropropane	ug/L	25.585		25.000	1.000	U 102	% 72-118
2-Hexanone	ug/L	25.533		25.000	5.000	U 102	% 36-144
Dibromochloromethane	ug/L	24.024		25.000	1.000	U 96	% 73-116
1,2-Dibromoethane (EDB)	ug/L	23.801		25.000	1.000	U 95	% 62-123
Chlorobenzene	ug/L	24.325		25.000	1.000	U 97	% 76-116
1,1,1,2-Tetrachloroethane	ug/L	23.439		25.000	1.000	U 94	% 77-120
Ethylbenzene	ug/L	22.789		25.000	1.000	U 91	% 75-125
m&p-Xylenes	ug/L	50.742		50.000	2.000	U 101	% 75-123
o-Xylene	ug/L	25.780		25.000	1.000	U 103	% 76-121
Styrene	ug/L	23.342		25.000	1.000	U 93	% 77-128
Bromoform	ug/L	21.906		25.000	1.000	U 88	% 65-115
Isopropylbenzene	ug/L	23.617		25.000	1.000	U 94	% 64-119
Bromobenzene	ug/L	25.182		25.000	1.000	U 101	% 76-118
1,1,2,2-Tetrachloroethane	ug/L	24.040		25.000	1.000	U 96	% 61-122
1,2,3-Trichloropropane	ug/L	23.708		25.000	1.000	U 95	% 62-124
n-Propylbenzene	ug/L	27.472		25.000	1.000	U 110	% 69-132
2-Chlorotoluene	ug/L	26.119		25.000	1.000	U 104	% 70-127
1,3,5-Trimethylbenzene	ug/L	27.377		25.000	1.000	U 110	% 70-132
4-Chlorotoluene	ug/L	26.196		25.000	1.000	U 105	% 70-126

Job Number.: 247195

QUALITY CONTROL RESULTS

Report Date.: 06/29/2006

CUSTOMER: Environmental Resource Management PROJECT: SECO ATTN: Alan Cork

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
LCS	Laboratory Control Sample	V06F23DSA	184087-002		06/23/2006	1242

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
tert-Butylbenzene	ug/L	27.077		25.000	1.000	U 108	%	70-133	
1,2,4-Trimethylbenzene	ug/L	27.499		25.000	1.000	U 110	%	71-131	
sec-Butylbenzene	ug/L	27.630		25.000	1.000	U 111	%	70-134	
1,3-Dichlorobenzene	ug/L	24.846		25.000	1.000	U 99	%	71-120	
p-Isopropyltoluene	ug/L	25.795		25.000	1.000	U 103	%	66-130	
1,4-Dichlorobenzene	ug/L	23.848		25.000	1.000	U 95	%	70-118	
n-Butylbenzene	ug/L	28.664		25.000	1.000	U 115	%	64-142	
1,2-Dichlorobenzene	ug/L	24.801		25.000	1.000	U 99	%	72-118	
1,2-Dibromo-3-chloropropane	ug/L	26.040		25.000	1.000	U 104	%	57-119	
1,2,4-Trichlorobenzene	ug/L	25.275		25.000	1.000	U 101	%	60-132	
Hexachlorobutadiene	ug/L	25.406		25.000	1.000	U 102	%	63-145	
Naphthalene	ug/L	24.444		25.000	1.000	U 98	%	57-128	
1,2,3-Trichlorobenzene	ug/L	23.621		25.000	1.000	U 94	%	66-124	

QUALITY CONTROL RESULTS

Job Number.: 247195

Report Date.: 06/29/2006

CUSTOMER: Environmental Resource Management

PROJECT: SECO

ATTN: Alan Cork

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: 8260B
 Method Description.: Volatile Organics

Equipment Code....: GCL16
 Batch.....: 184088

Analyst...: jdn

MB	Method Blank			184087-001		06/23/2006 1221
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
Dichlorodifluoromethane	ug/L	1.000	U						
Chloromethane	ug/L	1.000	U						
Vinyl chloride	ug/L	1.000	U						
Bromomethane	ug/L	1.000	U						
Chloroethane	ug/L	1.000	U						
Trichlorofluoromethane	ug/L	1.000	U						
1,1-Dichloroethene	ug/L	1.000	U						
Carbon disulfide	ug/L	5.000	U						
Acetone	ug/L	5.000	U						
Methylene chloride	ug/L	1.000	U						
trans-1,2-Dichloroethene	ug/L	1.000	U						
Methyl-tert-butyl-ether (MTBE)	ug/L	1.000	U						
1,1-Dichloroethane	ug/L	1.000	U						
2,2-Dichloropropane	ug/L	1.000	U						
2-Butanone (MEK)	ug/L	5.000	U						
Bromochloromethane	ug/L	1.000	U						
Chloroform	ug/L	1.000	U						
1,1,1-Trichloroethane	ug/L	1.000	U						
1,1-Dichloropropene	ug/L	1.000	U						
Carbon tetrachloride	ug/L	1.000	U						
Benzene	ug/L	1.000	U						
1,2-Dichloroethane	ug/L	1.000	U						
1,2-Dichloropropane	ug/L	1.000	U						
Dibromomethane	ug/L	1.000	U						
Bromodichloromethane	ug/L	1.000	U						
cis-1,3-Dichloropropene	ug/L	1.000	U						
4-Methyl-2-pentanone (MIBK)	ug/L	5.000	U						
Toluene	ug/L	1.000	U						
trans-1,3-Dichloropropene	ug/L	1.000	U						
1,1,2-Trichloroethane	ug/L	1.000	U						
Tetrachloroethene	ug/L	1.000	U						
1,3-Dichloropropane	ug/L	1.000	U						
2-Hexanone	ug/L	5.000	U						
Dibromochloromethane	ug/L	1.000	U						
1,2-Dibromoethane (EDB)	ug/L	1.000	U						
Chlorobenzene	ug/L	1.000	U						
1,1,1,2-Tetrachloroethane	ug/L	1.000	U						
Ethylbenzene	ug/L	1.000	U						
m&p-Xylenes	ug/L	2.000	U						
o-Xylene	ug/L	1.000	U						
Styrene	ug/L	1.000	U						
Bromoform	ug/L	1.000	U						
Isopropylbenzene	ug/L	1.000	U						
Bromobenzene	ug/L	1.000	U						
1,1,2,2-Tetrachloroethane	ug/L	1.000	U						
1,2,3-Trichloropropane	ug/L	1.000	U						
n-Propylbenzene	ug/L	1.000	U						
2-Chlorotoluene	ug/L	1.000	U						
1,3,5-Trimethylbenzene	ug/L	1.000	U						
4-Chlorotoluene	ug/L	1.000	U						

QUALITY CONTROL RESULTS

Job Number.: 247195

Report Date.: 06/29/2006

CUSTOMER: Environmental Resource Management

PROJECT: SECO

ATTN: Alan Cork

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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MB	Method Blank		184087-001		06/23/2006	1221
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
tert-Butylbenzene	ug/L	1.000	U						
1,2,4-Trimethylbenzene	ug/L	1.000	U						
sec-Butylbenzene	ug/L	1.000	U						
1,3-Dichlorobenzene	ug/L	1.000	U						
p-Isopropyltoluene	ug/L	1.000	U						
1,4-Dichlorobenzene	ug/L	1.000	U						
n-Butylbenzene	ug/L	1.000	U						
1,2-Dichlorobenzene	ug/L	1.000	U						
1,2-Dibromo-3-chloropropane	ug/L	1.000	U						
1,2,4-Trichlorobenzene	ug/L	1.000	U						
Hexachlorobutadiene	ug/L	1.000	U						
Naphthalene	ug/L	1.000	U						
1,2,3-Trichlorobenzene	ug/L	1.000	U						

QUALITY CONTROL RESULTS

Job Number.: 247195

Report Date.: 06/29/2006

CUSTOMER: Environmental Resource Management

PROJECT: SECO

ATTN: Alan Cork

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: 8260B

Method Description.: Volatile Organics

Equipment Code....: GCL2

Batch.....: 184283

Analyst...: djd

LCS	Laboratory Control Sample	V06F270SA	184279-002			06/27/2006 1039
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
cis-1,2-Dichloroethene	ug/L	25.011		25.000	1.000	U 100	%	76-125	
Trichloroethene	ug/L	26.371		25.000	1.000	U 105	%	75-124	

QUALITY CONTROL RESULTS

Job Number.: 247195

Report Date.: 06/29/2006

CUSTOMER: Environmental Resource Management

PROJECT: SECO

ATTN: Alan Cork

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: 8260B

Method Description.: Volatile Organics

Equipment Code....: GCL2

Batch.....: 1842B3

Analyst...: djd

MB	Method Blank	184279-001	06/27/2006	1017
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
cis-1,2-Dichloroethene	ug/L	1.000	U						
Trichloroethene	ug/L	1.000	U						

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 06/29/2006

REPORT COMMENTS

- 1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
- 2) Soil, sediment and sludge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.
- 3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
- 4) The test results for the noted analytical method(s) meet the requirements of NELAC. Lab Cert. ID# 100201
- 5) According to 40CFR Part 136.3, pH, Chlorine Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.

Glossary of flags, qualifiers and abbreviations (any number of which may appear in the report)

Inorganic Qualifiers (Q-Column)

- U Analyte was not detected at or above the stated limit.
- < Not detected at or above the reporting limit.
- J Result is less than the RL, but greater than or equal to the method detection limit.
- B Result is less than the CRDL/RL, but greater than or equal to the IDL/MDL.
- S Result was determined by the Method of Standard Additions.
- F AFCEE: Result is less than the RL, but greater than or equal to the method detection limit.

Inorganic Flags (Flag Column)

- ICV,CCV,ICB,CCB,ISA,ISB,CRI,CRA,MRL: Instrument related QC exceed the upper or lower control limits.
- * LCS, LCD, MD: Batch QC exceeds the upper or lower control limits.
- + MSA correlation coefficient is less than 0.995.
- 4 MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
- E SD: Serial dilution exceeds the control limits.
- H MB, EB1, EB2, EB3: Batch QC is greater than reporting limit or had a negative instrument reading lower than the absolute value of the reporting limit.
- N MS, MSD: Spike recovery exceeds the upper or lower control limits.
- W AS(GFAA) Post-digestion spike was outside 85-115% control limits.

Organic Qualifiers (Q - column)

- U Analyte was not detected at or above the stated limit.
- ND Compound not detected.
- J Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).
- Q Result was qualitatively confirmed, but not quantified.
- C Pesticide identification was confirmed by GC/MS.
- Y The chromatographic response resembles a typical fuel pattern.
- Z The chromatographic response does not resemble a typical fuel pattern.
- E Result exceeded calibration range, secondary dilution required.
- F AFCEE:Result is an estimated value below the reporting limit or a tentatively identified compound (TIC)

Organic Flags (Flags Column)

- B MB: Batch QC is greater than reporting limit.
- * LCS, LCD, ELC, ELD, CV, MS, MSD, Surrogate: Batch QC exceeds the upper or lower control limits.
- EB1, EB2, EB3, MLE: Batch QC is greater than reporting Limit
- A Concentration exceeds the instrument calibration range
- a Concentration is below the method Reporting Limit (RL)
- B Compound was found in the blank and sample.
- D Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a b.
- H Alternate peak selection upon analytical review
- I Indicates the presence of an interference, recovery is not calculated.
- M Manually integrated compound.
- P The lower of the two values is reported when the % difference between the results of two GC columns is

Q U A L I T Y A S S U R A N C E M E T H O D S

R E F E R E N C E S A N D N O T E S

Report Date: 06/29/2006

greater than 25%.

Abbreviations

AS	Post Digestion Spike (GFAA Samples - See Note 1 below)
Batch	Designation given to identify a specific extraction, digestion, preparation set, or analysis set
CAP	Capillary Column CCB Continuing Calibration Blank
CCV	Continuing Calibration Verification
CF	Confirmation analysis of original
C1	Confirmation analysis of D1 or D2
C2	Confirmation analysis of D2 or D3
C3	Confirmation analysis of D3 or D1
CRA	Low Level Standard Check - GFAA; Mercury
CRI	Low Level Standard Check - ICP
CV	Calibration Verification Standard
Dil Fac	Dilution Factor - Secondary dilution analysis
D1	Dilution 1
D2	Dilution 2
D3	Dilution 3
DLFac	Detection Limit Factor
DSH	Distilled Standard - High Level
DSL	Distilled Standard - Low Level
DSM	Distilled Standard - Medium Level
EB1	Extraction Blank 1
EB2	Extraction Blank 2
EB3	DI Blank
ELC	Method Extracted LCS
ELD	Method Extracted LCD
ICAL	Initial calibration
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
ISA	Interference Check Sample A - ICAP
ISB	Interference Check Sample B - ICAP
Job No.	The first six digits of the sample ID which refers to a specific client, project and sample group Lab ID An 8 number unique laboratory identification
LCD	Laboratory Control Standard Duplicate
LCS	Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest
MB	Method Blank or (PB) Preparation Blank
MD	Method Duplicate
MDL	Method Detection Limit
MLE	Medium Level Extraction Blank
MRL	Method Reporting Limit Standard
MSA	Method of Standard Additions
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not Detected
PREPF	Preparation factor used by the Laboratory's Information Management System (LIMS)
PDS	Post Digestion Spike (ICAP)
RA	Re-analysis of original
A1	Re-analysis of D1
A2	Re-analysis of D2
A3	Re-analysis of D3
RD	Re-extraction of dilution
RE	Re-extraction of original
RC	Re-extraction Confirmation
RL	Reporting Limit
RPD	Relative Percent Difference of duplicate (unrounded) analyses
RRF	Relative Response Factor
RT	Retention Time

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

Report Date: 06/29/2006

RTW Retention Time Window Sample ID A 9 digit number unique for each sample, the first six digits are referred as the job number

SCB Seeded Control Blank

SD Serial Dilution (Calculated when sample concentration exceeds 50 times the MDL)

UCB Unseeded Control Blank

SSV Second Source Verification Standard

SLCS Solid Laboratory Control Standard(LCS)

PHC pH Calibration Check LCSP pH Laboratory Control Sample

LCDP pH Laboratory Control Sample Duplicate

MDPH pH Sample Duplicate

MDFP Flashpoint Sample Duplicate

LCFP Flashpoint LCS

G1 Gelex Check Standard Range 0-1

G2 Gelex Check Standard Range 1-10

G3 Gelex Check Standard Range 10-100

G4 Gelex Check Standard Range 100-1000

Note 1: The Post Spike Designation on Batch QC for GFAA is designated with an "S" added to the current abbreviation used. EX. LCS S=LCS Post Spike (GFAA); MSS=MS Post Spike (GFAA)

Note 2: The MD calculates an absolute difference (A) when the sample concentration is less than 5 times the reporting limit. The control limit is represented as +/- the RL.



ENVIRONMENTAL RESOURCES MANAGEMENT, INC.
1630 Heritage Landing Drive, Suite 100
St. Charles, MO 63303
636/928-0300
636/928-2050 (fax)

SAMPLE CHAIN OF CUSTODY

247195

Page 1 of 1

COP ES: White & Yellow copies accompany sample shipment to laboratory. White copy to be returned to ERM for files. Yellow copy retained by laboratory. Pink copy retained by sampler.

Attachment B

Confirmation Sampling Results After Stripper Tower Media Change-Out

**SEVERN
TRENT**

STL

STL Chicago
2417 Bond Street
University Park, IL 60466

Tel: 708 534 5200 Fax: 708 534 5211
www.stl-inc.com

SEVERN TRENT LABORATORIES ANALYTICAL REPORT

JOB NUMBER: 247733

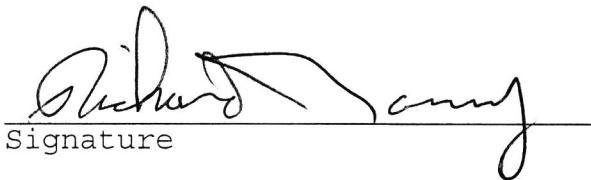
Prepared For:

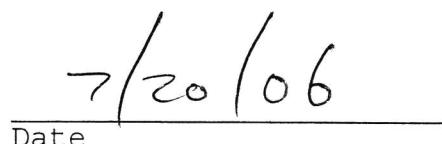
Environmental Resource Management
1630 Heritage Landing Drive
Suite 100
St. Charles, MO 63303

Project: Seco

Attention: Alan Cork

Date: 07/20/2006


Signature


Date

Name: Rich Mannz
Title: Project Manager
E-Mail: rmannz@stl-inc.com

STL Chicago
2417 Bond Street
University Park, IL 60466

PHONE: (708) 534-5200
FAX...: (708) 534-5211

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BY: _____

This Report Contains (14) Pages

Severn Trent Laboratories Chicago
GC/MS Case Narrative

Environmental Resource Management
SECO
Job Number: 247733
VOA DATA

1. The water sample was properly preserved and analyzed within the 14-day hold time for preserved samples.
2. All Method Blank target compounds were below reporting limits.
3. The LCS (Laboratory Control Sample) sample had all controlled spike recoveries within the in-house generated QC limits.
4. Matrix Spike/Matrix Spike Duplicate analyses were not performed on this sample set.
5. All of the volatile samples had surrogate recoveries within the in-house generated QC limits.
6. The sample was prepared using Method 5030 and analyzed following SW846 Method 8260B and 8000B. All other calibration criteria were met per method or SOP (for minimum R values for certain compounds). The low point in the initial calibration verifies the base reporting limits. The target compounds were quantitated using the initial calibration.
7. All internal standard areas and retention times were within SOP acceptance limits as compared to the corresponding calibration verification standard.
8. The sample was analyzed without dilution using a 10ml purge volume.


John Nagel
GC/MS Dept.

7-20-00
Date

STL Chicago is part of Severn Trent Laboratories, Inc.

S A M P L E I N F O R M A T I O N
Date: 07/20/2006

Job Number.: 247733

Customer...: Environmental Resource Management
Attn.....: Alan Cork

Project Number.....: 20006438

Customer Project ID....: SECO
Project Description....: Seco

Laboratory Sample ID	Customer Sample ID	Sample Matrix	Date Sampled	Time Sampled	Date Received	Time Received
247733-1	STRIPPER TOWER DISCHARGE	Water	07/17/2006	15:05	07/19/2006	09:45

STL Chicago is part of Severn Trent Laboratories, Inc.

* In Description = Dry Wgt.

Page 2

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LABORATORY TEST RESULTS						
Job Number: 247733		Date: 07/20/2006				
CUSTOMER: Environmental Resource Management		PROJECT: SECO		ATTN: Alan Cork		
Customer Sample ID: STRIPPER TOWER DISCHARGE Date Sampled.....: 07/17/2006 Time Sampled.....: 15:05 Sample Matrix.....: Water				Laboratory Sample ID: 247733-1 Date Received.....: 07/19/2006 Time Received.....: 09:45		
TEST METHOD	PARAMETER/TEST DESCRIPTION	SAMPLE RESULT	REPORTING LIMIT	UNITS	DATE	TECH
	n-Propylbenzene 2-Chlorotoluene 1,3,5-Trimethylbenzene 4-Chlorotoluene tert-Butylbenzene 1,2,4-Trimethylbenzene sec-Butylbenzene 1,3-Dichlorobenzene p-Isopropyltoluene 1,4-Dichlorobenzene n-Butylbenzene 1,2-Dichlorobenzene 1,2-Dibromo-3-chloropropane 1,2,4-Trichlorobenzene Hexachlorobutadiene Naphthalene 1,2,3-Trichlorobenzene	ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND ND	1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0 1.0	ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L ug/L	07/19/06 07/19/06 07/19/06 07/19/06 07/19/06 07/19/06 07/19/06 07/19/06 07/19/06 07/19/06 07/19/06 07/19/06 07/19/06 07/19/06 07/19/06 07/19/06 07/19/06 07/19/06	jdn jdn jdn jdn jdn jdn jdn jdn jdn jdn jdn jdn jdn jdn jdn jdn jdn jdn jdn jdn

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L A B O R A T O R Y C H R O N I C L E

Job Number: 247733

Date: 07/20/2006

CUSTOMER: Environmental Resource Management

PROJECT: SECO

ATTN: Alan Cork

Lab ID:	Client ID:	Method	Description	Date Recvd:	Sample Date:	Run#	Batch#	Prep BT #(s)	Date/Time Analyzed	Dilution
247733-1	STRIPPER TOWER DISCHARGE	METHOD	DESCRIPTION	07/19/2006	07/17/2006					
5030B	5030 10 mL Purge Prep			1	07/19/2006	185816		2258		
8260B	Volatile Organics			1	07/19/2006	185817	185816	2258	1.00000	

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S U R R O G A T E R E C O V E R I E S R E P O R T

Job Number.: 247733

Report Date.: 07/20/2006

CUSTOMER: Environmental Resource Management

PROJECT: SECO

ATTN: Alan Cork

Method.....: Volatile Organics
Method Code...: 8260B

Test Matrix...: Water
Batch(s).....: 185817

Prep Batch..: 185816

Lab ID	DT	Sample ID	Date	12DCED	BRFLBE	DBRFLM	TOLD8
LCS			07/19/2006	117	108	109	100
MB			07/19/2006	117	109	110	102
247733- 1		STRIPPER TOWER DISCHARGE	07/19/2006	116	111	110	100

Test	Test Description	Limits
12DCED	1,2-Dichloroethane-d4 (surr)	62 - 127
BRFLBE	4-Bromofluorobenzene (surr)	67 - 132
DBRFLM	Dibromofluoromethane (surr)	77 - 119
TOLD8	Toluene-d8 (surr)	81 - 126

QUALITY CONTROL RESULTS

Job Number.: 247733

Report Date.: 07/20/2006

CUSTOMER: Environmental Resource Management

PROJECT: SECO

ATTN: Alan Cork

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
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Test Method.....: 8260B

Method Description.: Volatile Organics

Equipment Code....: GCL2

Batch.....: 185817

Analyst...: jdn

LCS	Laboratory Control Sample	V06G19DSA	185816-002			07/19/2006	2235		
Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
Dichlorodifluoromethane	ug/L	32.393		25.000	1.000	U 130	%	24-171	
Chloromethane	ug/L	28.684		25.000	1.000	U 115	%	31-182	
Vinyl chloride	ug/L	27.467		25.000	1.000	U 110	%	52-134	
Bromomethane	ug/L	34.080		25.000	1.000	U 136	%	31-188	
Chloorethane	ug/L	28.256		25.000	1.000	U 113	%	58-148	
Trichlorofluoromethane	ug/L	31.790		25.000	1.000	U 127	%	54-142	
1,1-Dichloroethene	ug/L	21.792		25.000	1.000	U 87	%	51-136	
Carbon disulfide	ug/L	20.929		25.000	5.000	U 84	%	21-111	
Acetone	ug/L	24.655		25.000	5.000	U 99	%	14-177	
Methylene chloride	ug/L	23.026		25.000	1.000	U 92	%	64-127	
trans-1,2-Dichloroethene	ug/L	23.327		25.000	1.000	U 93	%	62-138	
Methyl-tert-butyl-ether (MTBE)	ug/L	24.628		25.000	1.000	U 99	%	55-142	
1,1-Dichloroethane	ug/L	23.171		25.000	1.000	U 93	%	70-124	
2,2-Dichloropropane	ug/L	24.257		25.000	1.000	U 97	%	68-127	
cis-1,2-Dichloroethene	ug/L	23.930		25.000	1.000	U 96	%	76-125	
2-Butanone (MEK)	ug/L	21.757		25.000	5.000	U 87	%	29-139	
Bromochloromethane	ug/L	25.490		25.000	1.000	U 102	%	57-116	
Chloroform	ug/L	25.395		25.000	1.000	U 102	%	75-122	
1,1,1-Trichloroethane	ug/L	27.648		25.000	1.000	U 111	%	70-127	
1,1-Dichloropropene	ug/L	23.248		25.000	1.000	U 93	%	70-125	
Carbon tetrachloride	ug/L	26.782		25.000	1.000	U 107	%	64-132	
Benzene	ug/L	22.363		25.000	1.000	U 89	%	75-122	
1,2-Dichloroethane	ug/L	27.473		25.000	1.000	U 110	%	67-120	
Trichloroethene	ug/L	23.461		25.000	1.000	U 94	%	75-124	
1,2-Dichloropropane	ug/L	23.659		25.000	1.000	U 95	%	76-116	
Dibromomethane	ug/L	24.654		25.000	1.000	U 99	%	68-116	
Bromodichloromethane	ug/L	28.220		25.000	1.000	U 113	%	75-125	
cis-1,3-Dichloropropene	ug/L	23.264		26.000	1.000	U 89	%	72-115	
4-Methyl-2-pentanone (MIBK)	ug/L	24.564		25.000	5.000	U 98	%	39-137	
Toluene	ug/L	22.416		25.000	1.000	U 90	%	77-120	
trans-1,3-Dichloropropene	ug/L	22.629		24.000	1.000	U 94	%	68-119	
1,1,2-Trichloroethane	ug/L	22.772		25.000	1.000	U 91	%	63-127	
Tetrachloroethene	ug/L	24.947		25.000	1.000	U 100	%	70-125	
1,3-Dichloropropane	ug/L	24.420		25.000	1.000	U 98	%	72-118	
2-Hexanone	ug/L	24.981		25.000	5.000	U 100	%	36-144	
Dibromochloromethane	ug/L	28.189		25.000	1.000	U 113	%	73-116	
1,2-Dibromoethane (EDB)	ug/L	24.270		25.000	1.000	U 97	%	62-123	
Chlorobenzene	ug/L	23.769		25.000	1.000	U 95	%	76-116	
1,1,2-Tetrachloroethane	ug/L	26.636		25.000	1.000	U 107	%	77-120	
Ethylbenzene	ug/L	24.217		25.000	1.000	U 97	%	75-125	
m&p-Xylenes	ug/L	49.182		50.000	2.000	U 98	%	75-123	
o-Xylene	ug/L	25.256		25.000	1.000	U 101	%	76-121	
Styrene	ug/L	23.473		25.000	1.000	U 94	%	77-128	
Bromoform	ug/L	27.519		25.000	1.000	U 110	%	65-115	
Isopropylbenzene	ug/L	21.993		25.000	1.000	U 88	%	64-119	
Bromobenzene	ug/L	23.932		25.000	1.000	U 96	%	76-118	
1,1,2,2-Tetrachloroethane	ug/L	23.474		25.000	1.000	U 94	%	61-122	
1,2,3-Trichloropropane	ug/L	23.751		25.000	1.000	U 95	%	62-124	
n-Propylbenzene	ug/L	23.121		25.000	1.000	U 92	%	69-132	
2-Chlorotoluene	ug/L	23.655		25.000	1.000	U 95	%	70-127	

QUALITY CONTROL RESULTS

Job Number.: 247733

Report Date.: 07/20/2006

CUSTOMER: Environmental Resource Management

PROJECT: SECO

ATTN: Alan Cork

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
---------	-------------	------------	--------	-----------------	------	------

LCS	Laboratory Control Sample	V06G19DSA	185816-002		07/19/2006	2235
-----	---------------------------	-----------	------------	--	------------	------

Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	*	Limits	F
1,3,5-Trimethylbenzene	ug/L	24.079		25.000	1.000	U 96	%	70-132	
4-Chlorotoluene	ug/L	23.068		25.000	1.000	U 92	%	70-126	
tert-Butylbenzene	ug/L	24.129		25.000	1.000	U 97	%	70-133	
1,2,4-Trimethylbenzene	ug/L	24.273		25.000	1.000	U 97	%	71-131	
sec-Butylbenzene	ug/L	24.016		25.000	1.000	U 96	%	70-134	
1,3-Dichlorobenzene	ug/L	23.096		25.000	1.000	U 92	%	71-120	
p-Isopropyltoluene	ug/L	23.708		25.000	1.000	U 95	%	66-130	
1,4-Dichlorobenzene	ug/L	22.784		25.000	1.000	U 91	%	70-118	
n-Butylbenzene	ug/L	24.671		25.000	1.000	U 99	%	64-142	
1,2-Dichlorobenzene	ug/L	23.997		25.000	1.000	U 96	%	72-118	
1,2-Dibromo-3-chloropropane	ug/L	22.398		25.000	1.000	U 90	%	57-119	
1,2,4-Trichlorobenzene	ug/L	22.970		25.000	1.000	U 92	%	60-132	
Hexachlorobutadiene	ug/L	24.527		25.000	1.000	U 98	%	63-145	
Naphthalene	ug/L	22.993		25.000	1.000	U 92	%	57-128	
1,2,3-Trichlorobenzene	ug/L	23.487		25.000	1.000	U 94	%	66-124	

QUALITY CONTROL RESULTS

Job Number.: 247733

Report Date.: 07/20/2006

CUSTOMER: Environmental Resource Management

PROJECT: SECO

ATTN: Alan Cork

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
---------	-------------	------------	--------	-----------------	------	------

Test Method.....: 8260B

Method Description.: Volatile Organics

Equipment Code....: GCL2

Batch.....: 185817

Analyst...: jdn

MB	Method Blank	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
Dichlorodifluoromethane		ug/L	1.000	U					
Chloromethane		ug/L	1.000	U					
Vinyl chloride		ug/L	1.000	U					
Bromomethane		ug/L	1.000	U					
Chloroethane		ug/L	1.000	U					
Trichlorofluoromethane		ug/L	1.000	U					
1,1-Dichloroethene		ug/L	1.000	U					
Carbon disulfide		ug/L	5.000	U					
Acetone		ug/L	5.000	U					
Methylene chloride		ug/L	1.000	U					
trans-1,2-Dichloroethene		ug/L	1.000	U					
Methyl-tert-butyl-ether (MTBE)		ug/L	1.000	U					
1,1-Dichloroethane		ug/L	1.000	U					
2,2-Dichloropropane		ug/L	1.000	U					
cis-1,2-Dichloroethene		ug/L	1.000	U					
2-Butanone (MEK)		ug/L	5.000	U					
Bromochloromethane		ug/L	1.000	U					
Chloroform		ug/L	1.000	U					
1,1,1-Trichloroethane		ug/L	1.000	U					
1,1-Dichloropropene		ug/L	1.000	U					
Carbon tetrachloride		ug/L	1.000	U					
Benzene		ug/L	1.000	U					
1,2-Dichloroethane		ug/L	1.000	U					
Trichloroethene		ug/L	1.000	U					
1,2-Dichloropropane		ug/L	1.000	U					
Dibromomethane		ug/L	1.000	U					
Bromodichloromethane		ug/L	1.000	U					
cis-1,3-Dichloropropene		ug/L	1.000	U					
4-Methyl-2-pentanone (MIBK)		ug/L	5.000	U					
Toluene		ug/L	1.000	U					
trans-1,3-Dichloropropene		ug/L	1.000	U					
1,1,2-Trichloroethane		ug/L	1.000	U					
Tetrachloroethene		ug/L	1.000	U					
1,3-Dichloropropane		ug/L	1.000	U					
2-Hexanone		ug/L	5.000	U					
Dibromochloromethane		ug/L	1.000	U					
1,2-Dibromoethane (EDB)		ug/L	1.000	U					
Chlorobenzene		ug/L	1.000	U					
1,1,1,2-Tetrachloroethane		ug/L	1.000	U					
Ethylbenzene		ug/L	1.000	U					
m&p-Xylenes		ug/L	2.000	U					
o-Xylene		ug/L	1.000	U					
Styrene		ug/L	1.000	U					
Bromoform		ug/L	1.000	U					
Isopropylbenzene		ug/L	1.000	U					
Bromobenzene		ug/L	1.000	U					
1,1,2,2-Tetrachloroethane		ug/L	1.000	U					
1,2,3-Trichloropropane		ug/L	1.000	U					
n-Propylbenzene		ug/L	1.000	U					
2-Chlorotoluene		ug/L	1.000	U					

QUALITY CONTROL RESULTS

Job Number.: 247733

Report Date.: 07/20/2006

CUSTOMER: Environmental Resource Management

PROJECT: SECO

ATTN: Alan Cork

QC Type	Description	Reag. Code	Lab ID	Dilution Factor	Date	Time
---------	-------------	------------	--------	-----------------	------	------

MB	Method Blank		185816-001		07/19/2006	2212
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Parameter/Test Description	Units	QC Result	QC Result	True Value	Orig. Value	QC Calc.	* Limits	F
1,3,5-Trimethylbenzene	ug/L	1.000	U					
4-Chlorotoluene	ug/L	1.000	U					
tert-Butylbenzene	ug/L	1.000	U					
1,2,4-Trimethylbenzene	ug/L	1.000	U					
sec-Butylbenzene	ug/L	1.000	U					
1,3-Dichlorobenzene	ug/L	1.000	U					
p-Isopropyltoluene	ug/L	1.000	U					
1,4-Dichlorobenzene	ug/L	1.000	U					
n-Butylbenzene	ug/L	1.000	U					
1,2-Dichlorobenzene	ug/L	1.000	U					
1,2-Dibromo-3-chloropropane	ug/L	1.000	U					
1,2,4-Trichlorobenzene	ug/L	1.000	U					
Hexachlorobutadiene	ug/L	1.000	U					
Naphthalene	ug/L	1.000	U					
1,2,3-Trichlorobenzene	ug/L	1.000	U					

Q U A L I T Y A S S U R A N C E M E T H O D S

R E F E R E N C E S A N D N O T E S

Report Date: 07/20/2006

REPORT COMMENTS

- 1) All pages of this report are integral parts of the analytical data. Therefore, this report should be reproduced only in its entirety.
- 2) Soil, sediment and sludge sample results are reported on a "dry weight" basis except when analyzed for landfill disposal or incineration parameters. All other solid matrix samples are reported on an "as received" basis unless noted differently.
- 3) Reporting limits are adjusted for sample size used, dilutions and moisture content if applicable.
- 4) The test results for the noted analytical method(s) meet the requirements of NELAC. Lab Cert. ID# 100201
- 5) According to 40CFR Part 136.3, pH, Chlorine Residual and Dissolved Oxygen analyses are to be performed immediately after aqueous sample collection. When these parameters are not indicated as field (e.g. pH Field) they were not analyzed immediately, but as soon as possible on laboratory receipt.

Glossary of flags, qualifiers and abbreviations (any number of which may appear in the report)

Inorganic Qualifiers (Q-Column)

- U Analyte was not detected at or above the stated limit.
- < Not detected at or above the reporting limit.
- J Result is less than the RL, but greater than or equal to the method detection limit.
- B Result is less than the CRDL/RL, but greater than or equal to the IDL/MDL.
- S Result was determined by the Method of Standard Additions.
- F AFCEE: Result is less than the RL, but greater than or equal to the method detection limit.

Inorganic Flags (Flag Column)

- ^ ICV,CCV,ICB,CCB,ISA,ISB,CRI,CRA,MRL: Instrument related QC exceed the upper or lower control limits.
- * LCS, LCD, MD: Batch QC exceeds the upper or lower control limits.
- + MSA correlation coefficient is less than 0.995.
- 4 MS, MSD: The analyte present in the original sample is 4 times greater than the matrix spike concentration; therefore, control limits are not applicable.
- E SD: Serial dilution exceeds the control limits.
- H MB, EB1, EB2, EB3: Batch QC is greater than reporting limit or had a negative instrument reading lower than the absolute value of the reporting limit.
- N MS, MSD: Spike recovery exceeds the upper or lower control limits.
- W AS(GFAA) Post-digestion spike was outside 85-115% control limits.

Organic Qualifiers (Q - Column)

- U Analyte was not detected at or above the stated limit.
- ND Compound not detected.
- J Result is an estimated value below the reporting limit or a tentatively identified compound (TIC).
- Q Result was qualitatively confirmed, but not quantified.
- C Pesticide identification was confirmed by GC/MS.
- Y The chromatographic response resembles a typical fuel pattern.
- Z The chromatographic response does not resemble a typical fuel pattern.
- E Result exceeded calibration range, secondary dilution required.
- F AFCEE:Result is an estimated value below the reporting limit or a tentatively identified compound (TIC)

Organic Flags (Flags Column)

- B MB: Batch QC is greater than reporting limit.
- * LCS, LCD, ELC, ELD, CV, MS, MSD, Surrogate: Batch QC exceeds the upper or lower control limits.
- ^ EB1, EB2, EB3, MLE: Batch QC is greater than reporting Limit
- A Concentration exceeds the instrument calibration range
- a Concentration is below the method Reporting Limit (RL)
- B Compound was found in the blank and sample.
- D Surrogate or matrix spike recoveries were not obtained because the extract was diluted for analysis; also compounds analyzed at a dilution will be flagged with a D.
- H Alternate peak selection upon analytical review
- I Indicates the presence of an interfence, recovery is not calculated.
- M Manually integrated compound.
- P The lower of the two values is reported when the % difference between the results of two GC columns is

QUALITY ASSURANCE METHODS

REFERENCES AND NOTES

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greater than 25%.

Abbreviations

AS	Post Digestion Spike (GFAA Samples - See Note 1 below)
Batch	Designation given to identify a specific extraction, digestion, preparation set, or analysis set
CAP	Capillary Column CCB Continuing Calibration Blank
CCV	Continuing Calibration Verification
CF	Confirmation analysis of original
C1	Confirmation analysis of A1 or D1
C2	Confirmation analysis of A2 or D2
C3	Confirmation analysis of A3 or D3
CRA	Low Level Standard Check - GFAA; Mercury
CRI	Low Level Standard Check - ICP
CV	Calibration Verification Standard
Dil Fac	Dilution Factor - Secondary dilution analysis
D1	Dilution 1
D2	Dilution 2
D3	Dilution 3
DLFac	Detection Limit Factor
DSH	Distilled Standard - High Level
DSL	Distilled Standard - Low Level
DSM	Distilled Standard - Medium Level
EB1	Extraction Blank 1
EB2	Extraction Blank 2
EB3	DI Blank
ELC	Method Extracted LCS
ELD	Method Extracted LCD
ICAL	Initial calibration
ICB	Initial Calibration Blank
ICV	Initial Calibration Verification
IDL	Instrument Detection Limit
ISA	Interference Check Sample A - ICAP
ISB	Interference Check Sample B - ICAP
Job No.	The first six digits of the sample ID which refers to a specific client, project and sample group Lab ID An 8 number unique laboratory identification
LCD	Laboratory Control Standard Duplicate
LCS	Laboratory Control Standard with reagent grade water or a matrix free from the analyte of interest
MB	Method Blank or (PB) Preparation Blank
MD	Method Duplicate
MDL	Method Detection Limit
MLE	Medium Level Extraction Blank
MRL	Method Reporting Limit Standard
MSA	Method of Standard Additions
MS	Matrix Spike
MSD	Matrix Spike Duplicate
ND	Not Detected
PREPF	Preparation factor used by the Laboratory's Information Management System (LIMS)
PDS	Post Digestion Spike (ICAP)
RA	Re-analysis of original
A1	Re-analysis of D1
A2	Re-analysis of D2
A3	Re-analysis of D3
RD	Re-extraction of dilution
RE	Re-extraction of original
RC	Re-extraction Confirmation
RL	Reporting Limit
RPD	Relative Percent Difference of duplicate (unrounded) analyses
RRF	Relative Response Factor
RT	Retention Time

Q U A L I T Y A S S U R A N C E M E T H O D S

R E F E R E N C E S A N D N O T E S

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RTW Retention Time Window Sample ID A 9 digit number unique for each sample, the first six digits are referred as the job number

SCB Seeded Control Blank

SD Serial Dilution (Calculated when sample concentration exceeds 50 times the MDL)

UCB Unseeded Control Blank

SSV Second Source Verification Standard

SLCS Solid Laboratory Control Standard(LCS)

PHC pH Calibration Check LCSP pH Laboratory Control Sample

LCDP pH Laboratory Control Sample Duplicate

MDPH pH Sample Duplicate

MDFP Flashpoint Sample Duplicate

LCFP Flashpoint LCS

G1 Gelex Check Standard Range 0-1

G2 Gelex Check Standard Range 1-10

G3 Gelex Check Standard Range 10-100

G4 Gelex Check Standard Range 100-1000

Note 1: The Post Spike Designation on Batch QC for GFAA is designated with an "S" added to the current abbreviation used. EX. LCS S=LCS Post Spike (GFAA); MSS=MS Post Spike (GFAA)

Note 2: The MD calculates an absolute difference (A) when the sample concentration is less than 5 times the reporting limit. The control limit is represented as +/- the RL.

**Chain of
Custody Record**

**SEVERN
TRENT**
STL
Severn Trent Laboratories, Inc.

247733

STL-4124 (0901)

Client ERM			Project Manager Mr. Alan Cork						Date 7/17/06	Chain of Custody Number 240120				
Address 11630 Heritage Landing Dr ste: 100			Telephone Number (Area Code)/Fax Number (636) 428-0300 Ext 326						Lab Number					
City St. Charles	State MO	Zip Code 63303	Site Contact Michael Bates	Lab Contact Rich Mannz	Analysis (Attach list if more space is needed)									
Project Name and Location (State) SECO, Washington, MO			Carrier/Waybill Number											
Contract/Purchase Order/Quote No.			Matrix			Containers & Preservatives						Special Instructions/ Conditions of Receipt		
Sample I.D. No. and Description (Containers for each sample may be combined on one line)		Date 7/17/06	Time 1505	Air <input checked="" type="checkbox"/>	Aqueous <input type="checkbox"/>	Sed. <input type="checkbox"/>	Soil <input type="checkbox"/>	Unpres. <input type="checkbox"/>	H ₂ SO ₄ <input type="checkbox"/>	HNO ₃ <input type="checkbox"/>	HCl <input type="checkbox"/>	NaOH <input type="checkbox"/>	ZnAc/ NaOH <input type="checkbox"/>	
STRIPPER RIVER Discharge								3					X	
Possible Hazard Identification								Sample Disposal						
<input checked="" type="checkbox"/> Non-Hazard <input type="checkbox"/> Flammable <input type="checkbox"/> Skin Irritant <input type="checkbox"/> Poison B <input type="checkbox"/> Unknown								<input type="checkbox"/> Return To Client <input type="checkbox"/> Disposal By Lab <input type="checkbox"/> Archive For _____ Months						
(A fee may be assessed if samples are retained longer than 1 month)														
Turn Around Time Required								QC Requirements (Specify)						
<input type="checkbox"/> 24 Hours <input type="checkbox"/> 48 Hours <input type="checkbox"/> 7 Days <input checked="" type="checkbox"/> 14 Days <input type="checkbox"/> 21 Days <input type="checkbox"/> Other _____														
1. Relinquished By ALC Bates								Date 7/18/06	Time 1400	1. Received By Jeff Miller		Date 07-18-06	Time 1400	
2. Relinquished By ALC Miller								Date 07-18-06	Time 1500	2. Received By Jeff Miller		Date 07-19-06	Time 0845	
3. Relinquished By								Date	Time	3. Received By Jeff Miller		Date	Time	
Comments Deliver to STL Chicago Lab														

DISTRIBUTION: WHITE - Returned to Client with Report: CANARY - Stays with the Sample: PINK - Field Copy